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ABSTRACT

This is the third edition of an annual report on trends in the well-being of America's children and youth. Part 1 of the report describes national trends for over 90 indicators of child and youth well-being based on data collected by the federal government. The information provided for each indicator includes one or more tables documenting recent historical trends and important population subgroup differences, graphics to highlight key trends and group contrasts, and accompanying text that describes the importance of each indicator and highlights the most salient features of the data. The indicators are grouped into five substantive areas: (1) population, family, and neighborhood; (2) economic security; (3) health conditions and health care; (4) social development, behavioral health, and teen fertility; and (5) education and achievement. Part 2 of the report compares the well-being of immigrant children, native-born children of immigrant parents, and native-born children of native-born parents. (Contains approximately 100 references.) (KB)

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Trends in the Well-Being of America's Children & Youth

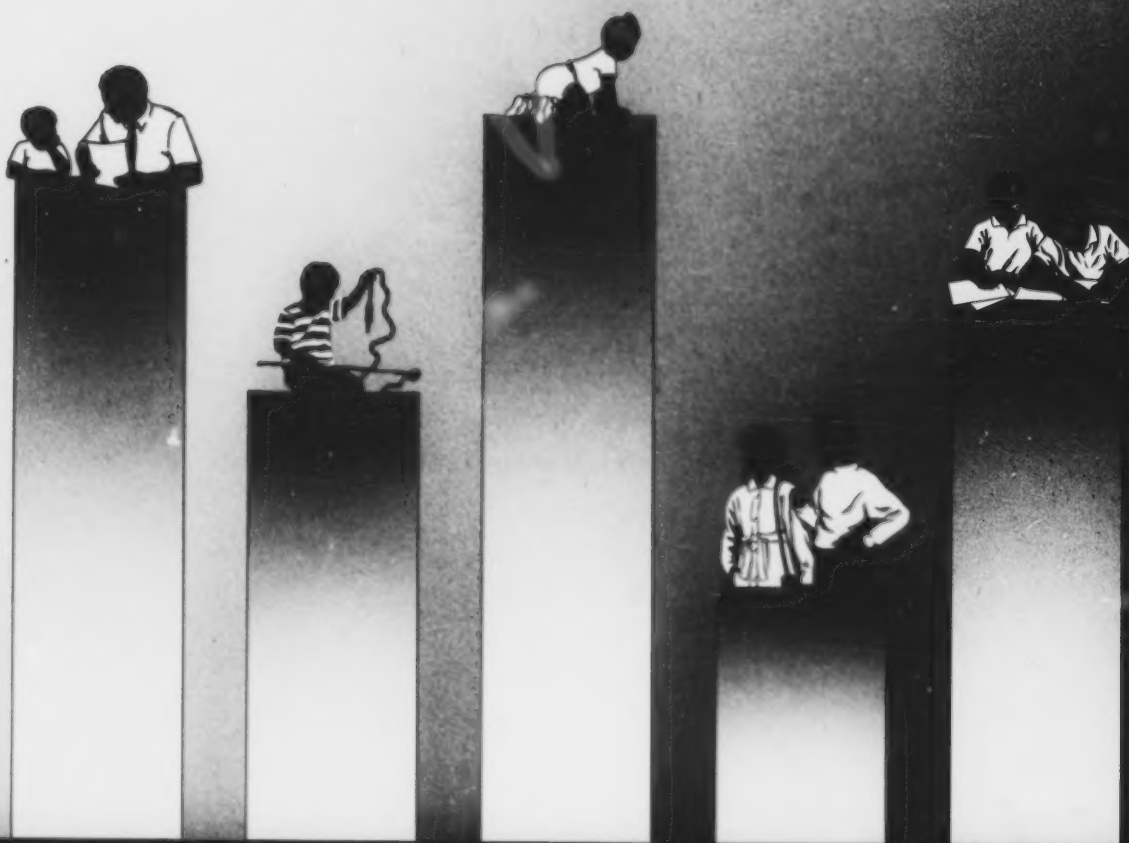
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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
OFFICE OF THE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION

Trends in the Well-Being of America's Children & Youth 1998



Part one of this document was produced by Child Trends, Inc.
(Brett Brown, Ph.D., project director; Gretchen Kirby, M.P.P., project manager)
and part two was produced by Donald J. Hernandez and Kathryn Darke for
The Office of the Assistant Secretary for Planning and Evaluation.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
OFFICE OF THE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION

Trends in the Well-Being of America's Children & Youth

PART 1



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by Child Trends, Inc.

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By Donald J. Hernandez and Kathryn Darke

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In addition, researchers from the Family and Child Research Network of the National Institute of Child Health and Human Development conducted original analyses for this report in order to produce indicators in areas with particular need of data development. We especially thank Dr. Randal Day of the University of Washington and Anne Driscoll of Child Trends, Inc. for a number of new measures they produced for this report.

Special thanks to the many in ASPE who contributed to the development, review, and production of this report. Thanks go to Pat Ruggles, Ann Segal, Barbara Broman, Chris Snow, Matt Stagner, Elisa Koff, Amy Nevel, Gil Crouse, Reuben Snipper, Devon Cornuel, and Leslie Hardy. David Peabody deserves special thanks for his creativity in designing this document.

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This report was produced under contract by Child Trends, Inc., a nonprofit, nonpartisan research organization dedicated to studying children, youth, and families through research, data collection, and data analyses. Brett Brown served as project director and Gretchen Kirby served as project manager. Individual sections of this report were headed by Child Trends staff as follows: Brett Brown, Population, Family, and Neighborhood; Richard Wertheimer, Economic Security; Gretchen Kirby, Health Conditions and Health Care; Martha Steketee, Social Development, Behavioral Health, and Teen Fertility; and Tamara Halle, Education and Achievement. Research assistance was provided by Michelle Harper and Nehal Patel. Production assistance was provided by Fanette Jones and Carla Butler. Editorial reviews were completed by Scott Forrey and other staff of the Urban Institute Press. In addition, Kris Moore and Carol Emig made many substantive and editorial contributions throughout the development of this report.

INTRODUCTION TO PART ONE

This is the third edition of an annual report from the Department of Health and Human Services (HHS) on trends in the well-being of our nation's children and youth. The report presents the most recent and reliable estimates on more than 90 indicators of well-being. It is intended to provide the policy community, the media, and all interested citizens with an accessible overview of data describing the condition of children in the United States.

The indicators have been organized into five broad areas:

- Population, family, and neighborhood;
- Economic security;
- Health conditions and health care;
- Social development, behavioral health, and teen fertility; and
- Education and achievement.

For each indicator, the report provides graphics to highlight key trends and important population subgroup differences, and tables that provide more detailed information for the interested user. These are accompanied by text that briefly describes the importance of each indicator and highlights the most salient features of the data.

INDICATORS INCLUDED IN THE REPORT

This report presents a broad and carefully chosen collection of national estimates of child and youth well-being. It reports indicators that have been collected more than once over the last few years so that trends may be presented. Where possible, trends are presented from the 1970s through the 1990s. In a few cases, data for earlier years are also presented, as are projections into the 21st century.

Decisions regarding which indicators to include in the report have been guided by a combination of scientific and practical considerations. In preparation for the first edition of this report, a list of indicators was culled from over 20 papers presented at a major national conference on indicators of child well-being. At this conference, nationally recognized experts representing a broad spectrum of disciplines and research interests related to child well-being, recommended key indicators that should be tracked on a regular basis by the federal statistical system.

The final list of indicators was modified based on a number of practical considerations including data availability (the data needed to be available for a nationally representative sample and on a regular basis), timeliness (the estimates had to be available for 1990 or later), and quality and consistency (the data had to be both reliable and consistently measured over time).

Important indicators have been added for this third edition based on recommendations from the staff of statistical agencies that are participating in the Federal Interagency Forum on Child and Family Statistics, described below. Additional indicators have been added based on the work of researchers from the National Institute of Child Health and Human Development (NICHD) and the Family and Child Research Network who have developed new indicators from existing data sources.

New indicators for this edition of the report include:

- Fertility rate and number of births (PF 1.7)
- Food security (ES 4.2)
- Firearm-related deaths (HC 1.6)
- Children and adolescents with HIV/AIDS (HC 2.13)
- Closeness with parents (SD 1.8)
- Parents' activities with children (SD 1.9)
- Sufficient hours of sleep (SD 2.5)

HIGHLIGHTS ON YOUTH

This report is intended to help readers develop a sense of how children and youth are faring overall. As an example, we offer below a selection of findings from the report that relate to the experience of teenagers.

- The overall teen birth rate for 15 to 19-year-old women has been dropping since 1991. Black teens have experienced the largest drop during that time period.
- Use of cigarettes, alcohol, marijuana, and cocaine by high school students has increased during the 1990s, following periods of decreasing use during the previous decade. Estimates for 1997, however, indicate that illicit drug use has leveled off and smoking has declined among younger teens (in the 8th grade).
- Following years of increase, the violent crime arrest rate for male youth ages 10 through 17 declined substantially between 1994 and 1996.
- Seventeen-year-old students have made modest gains in mathematics and science proficiency since the early 1980s.
- The mortality rate for black youth ages 15 through 19 has declined substantially since 1994, following dramatic increases that began in the late 1980s. Rates for 1996 are still 40 percent above 1985 levels, however.
- Receipt of early prenatal care by teen mothers has increased steadily during the 1990s.

THE NEED FOR BETTER DATA ON CHILDREN

As this report demonstrates, the data available for tracking the well-being of children and youth at the national level are fairly extensive. Even so, there remain major gaps in the federal statistical system that must be filled if we are to have a complete picture of the quality of our children's lives.

We have few measures of social development and health-related behaviors for very young and pre-teenage children that are measured on a regular basis. For example, we currently lack good indicators of school readiness for young children. Measures of mental health for any age child are rare, though one such measure was recently added to the National Health Interview Survey. Positive measures of social development and related behaviors are also sparse, with the result that the current set of indicators may present a gloomier picture of our children's overall well-being than is in fact the case. New indicators that reflect the positive developments we desire for our children and youth clearly need to be developed and incorporated into the federal statistical system.

We have very few indicators available that reflect important social processes affecting child well-being that go on inside the family and within the neighborhood. Measures of parent-child interactions, critical to the social and intellectual development of children, are only now beginning to work their way into regularly repeated national surveys. We currently lack an annual measure of whether both biological parents of a child are in the household. Reliable indicators of child homelessness also need to be developed.

Other important areas in need of measurement development or improvements in the quality, consistency, and frequency of available data include child abuse and neglect, youth violent crime, day care quality, learning disabilities, and measures of children in institutionalized care.

Finally, data that can be used to track the well-being of children at the state and local levels are much less plentiful than at the national level. As state and local governments take on increasing levels of responsibility for the design and implementation of all sorts of government programs affecting children, youth, and their families, the need for such information is increasing. The federal statistical system is positioned to play a significant role in increasing the availability of such data for use at the state and local level.

FEDERAL INTERAGENCY FORUM ON CHILD AND FAMILY STATISTICS

The Federal Interagency Forum on Child and Family Statistics, an interagency group of leaders of federal agencies and departments responsible for collecting data on children and youth, has adopted a mandate to improve the federal statistical system regarding data on children, youth, and their families. Member agencies have played a crucial role in the production of this report, providing data and carefully reviewing relevant text. This forum, created in 1995, will continue to develop strategies for improving the federal statistical system in ways that preserve existing data in these areas while filling in the data gaps described above.

For example, member agencies have recently been working to develop new indicators in several areas where they are currently lacking. A subcommittee on Fatherhood has been established and is working with agency researchers and members of the NICHD Family and Child Research Network to develop new indicators related to fathering and male fertility and incorporating them into federal surveys where appropriate. Several indicators developed through this effort are included in this year's report (See SD 1.8 *closeness with parents*, and SD 1.9 *parent's activities with children*). In addition, the Department of Agriculture has recently developed a measure of food security for children which is also included in this report. As additional measures from these and similar efforts become available, they will be incorporated into future editions of the report.

USING THE DOCUMENT

In the presentation of data for this report, percents and rates were, as a rule, rounded to the nearest whole number. Estimates based on the Decennial Census, the National Vital Statistics System, and surveys with very large sample sizes were often presented to one decimal place since differences of less than one percentage point are often or always statistically significant from these sources.

Practical considerations did not allow for the use of tests of statistical significance for all cross-time and between-group differences discussed in the text, though they were used in many cases. When such tests were not available, small differences were either not reported in the text, or were reported cautiously. Often in such cases estimates were simply reported without any claims as to which were in fact higher or lower.

Finally, the user should note that in all tables and figures, unless otherwise clearly specified, race-specific estimates (e.g., white, black, Native American, Asian) include Hispanics of those races even when a separate estimate is given for Hispanics. In cases where Hispanics have been separated, "non-Hispanic" will follow the race designation as in "white, non-Hispanic." By contrast, in the textual descriptions of the data, races are in most cases referred to simply as white, black, Native American, or Asian, whether or not they include Hispanics.



Population, Family and Neighborhood

PF 1.1

NUMBER OF CHILDREN UNDER AGE 18 IN THE UNITED STATES

Though the total population of the United States has grown steadily over the last four decades, growth in the number of children has been less steady, and the number of children has even decreased during some periods.

From 1950 to 1960, roughly the period of the baby boom, the number of children under age 18 increased by 36 percent from 47.3 to 64.5 million (see Figure PF 1.1). The number rose at a more modest rate in the ensuing decade to 69.8 million in 1970. The number actually declined to 63.7 million by 1980, and held steady over the next decade. Between 1990 and 1997, the number of children rose by more than five million to 69.5 million. The U.S. Bureau of the Census projects that the number of children will continue to rise over the next several decades, reaching 77.6 million by the year 2020.

Table PF 1.1

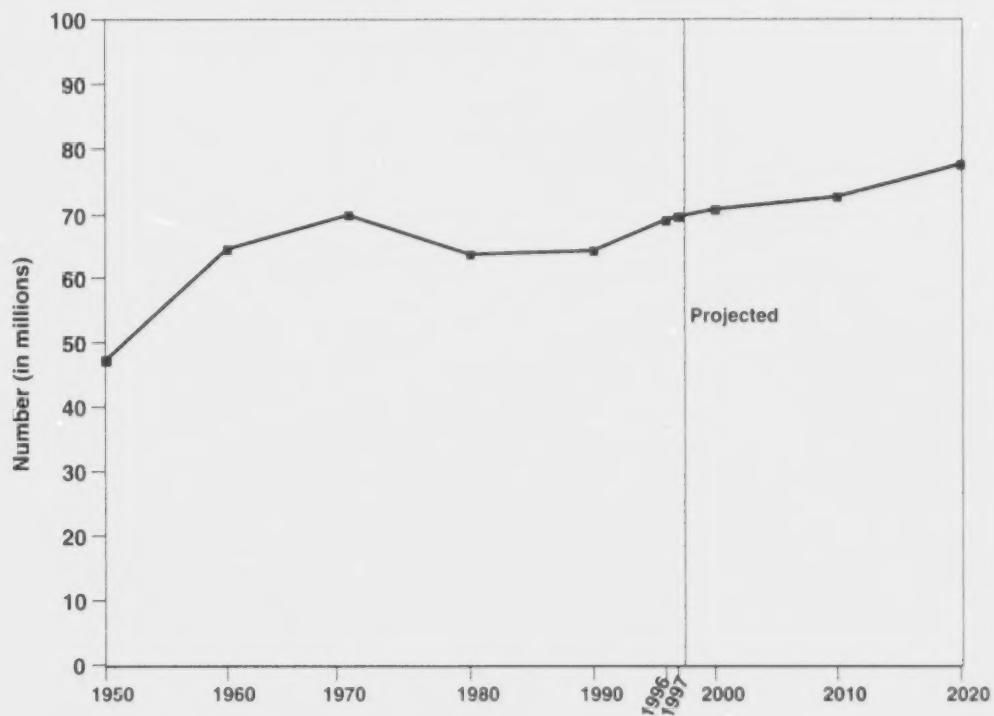
Number (in millions) of children under age 18 in the United States, by age: selected years, 1950-1997, and projected, 2000-2020

	1950	1960	1970	1980	1990	1996	1997	Projected		
								2000	2010	2020
All children	47.3	64.5	69.8	63.7	64.2	69.0	69.5	70.8	72.5	77.6
Under age 6	19.1	24.3	20.9	19.6	22.5	23.4	23.2	22.9	23.9	26.4
Ages 6-11	15.3	21.8	24.6	20.8	21.6	23.0	23.4	24.3	23.6	25.8
Ages 12-17	12.9	18.4	24.3	23.3	20.1	22.6	23.0	23.6	25.0	25.4

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 311, No. 519, No. 917, No. 1130 (Table 2 in each); and unpublished data, U.S. Bureau of the Census.

Figure PF 1.1

Number (in millions) of children under age 18 in the United States: selected years, 1950-1997, and projected, 2000-2020



Source: U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 311, No. 519, No. 917, No. 1130 (Table 2 in each); and unpublished data, U.S. Bureau of the Census.

PF 1.2

CHILDREN AS A PERCENTAGE OF THE TOTAL POPULATION

The percentage of the total population who are children can have important consequences for the entire population. On the one hand, because children are for the most part dependent and in need of investment to become productive citizens, they may present special short-term fiscal challenges to society when they constitute a relatively high proportion of the overall population. On the other hand, as they grow up and become productive adults they will provide support for those entering retirement and for the next generation of children.

In 1950 children under age 18 constituted 31 percent of the overall population (see Figure PF 1.2). During the next decade, children as a proportion of the population rose rapidly to 36 percent. The rise in birthrates that produced this increase in the proportion of children in the population during the 1950s is commonly known as the baby boom. Since that peak in 1960, the percentage has been declining to its current level of 26 percent. Projections by the U.S. Bureau of the Census predict that this proportion will drop further to 24 percent by the year 2010, and will remain at approximately that level through 2020.

In contrast, the proportion of the population ages 65 and older has increased from 8 percent in 1950 to 13 percent in 1997. That percentage is projected to increase to 16 percent by the year 2020.

Table PF 1.2

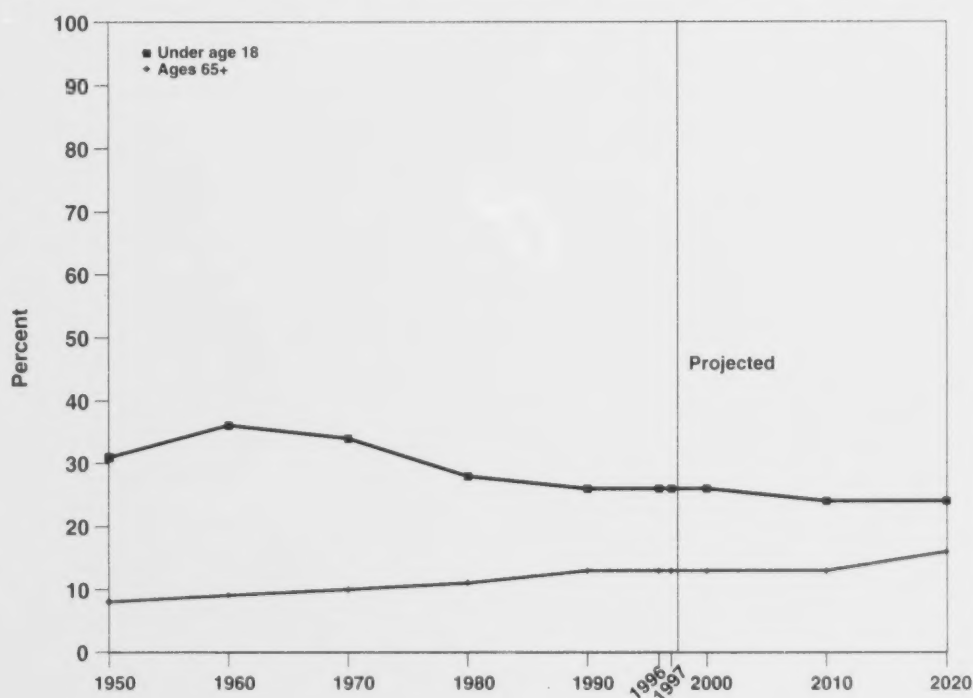
Persons in selected age groups as a percentage of the total U.S. population: selected years, 1950-1997, and projected, 2000-2020

Age group	1950	1960	1970	1980	1990	1996	1997	Projected		
								2000	2010	2020
Under age 18	31	36	34	28	26	26	26	26	24	24
Ages 18-64	61	55	56	61	62	61	61	62	62	59
Ages 65+	8	9	10	11	13	13	13	13	13	16

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 311, No. 519, No. 917, No. 1130 (Table 2 in each); and unpublished data, U.S. Bureau of the Census.

Figure PF 1.2

Children under age 18 and adults ages 65 and over as a percentage of the U.S. population: selected years, 1950-1997, and projected, 2000-2020



Source: U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 311, No. 519, No. 917, No. 1130 (Table 2 in each); and unpublished data, U.S. Bureau of the Census.

PF 1.3

PERCENTAGE OF FAMILIES WITH CHILDREN AND DISTRIBUTION OF FAMILIES BY NUMBER OF CHILDREN

Since 1960, Americans have been moving toward having families with fewer children. Indeed, a growing percentage of families have no minor children of their own in their household. Between 1960 and 1990, the percentage of families with four or more own children under age 18 in the household decreased from 9 percent to 3 percent, where it has remained through 1997 (see Figure PF 1.3). During the same period, the proportion of families with no minor children grew from 43 percent to 51 percent.

Differences by Race and Hispanic Origin. These general trends are also evident when white, black, and Hispanic families are considered separately, though the levels are substantially different for each group (see Table PF 1.3). For example, between 1970 and 1997 the percentage of black families with four or more children dropped from 19 percent to 5 percent. The percentage for whites during that period went from 9 percent to 2 percent. For Hispanic families, the percentage dropped from 10 percent to 6 percent between 1980 (the first year for which Hispanic estimates are available) and 1997.

Black and Hispanic families were considerably less likely than white families to be without any minor children, with proportions of 42 percent, 35 percent, and 52 percent, respectively, in 1997. They were also more likely than white families to have four or more children, though these differences were smaller than in previous decades.

Table PF 1.3

Percentage distribution of families in the United States by number of own children under age 18 and by race and Hispanic origin^a: selected years, 1960-1997

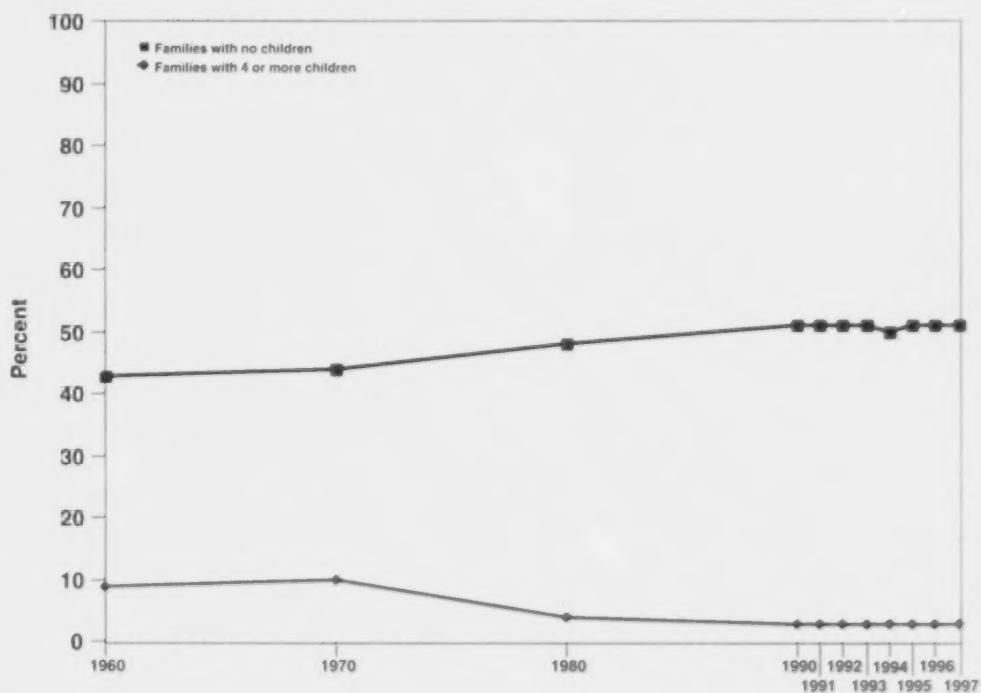
	1960	1970	1980	1990	1991	1992	1993	1994	1995	1996	1997
All families											
Without own children	43	44	48	51	51	51	51	50	51	51	51
One child	19	18	21	21	20	20	20	20	20	20	20
2 children	18	17	19	19	19	18	19	19	19	19	19
3 children	11	11	8	7	7	7	7	8	7	7	7
4 or more children	9	10	4	3	3	3	3	3	3	3	3
White families											
Without own children	43	45	49	51	53	53	53	52	52	52	52
One child	19	18	21	21	19	20	19	19	20	19	20
2 children	18	18	19	19	18	18	19	19	19	19	19
3 children	11	11	8	7	7	7	7	7	7	7	7
4 or more children	9	9	4	3	3	3	2	2	2	3	2
Black families											
Without own children	—	39	38	41	41	42	42	40	42	43	42
One child	—	18	23	25	25	24	25	25	24	24	24
2 children	—	15	20	19	19	19	18	20	20	18	20
3 children	—	10	10	9	9	10	10	9	9	9	9
4 or more children	—	19	8	6	6	5	5	5	5	5	5
Hispanic families											
Without own children	—	—	31	37	36	36	37	36	36	36	35
One child	—	—	23	23	22	22	23	22	23	23	24
2 children	—	—	23	21	23	22	22	23	23	23	23
3 children	—	—	13	12	12	13	12	13	12	12	12
4 or more children	—	—	10	7	7	7	7	6	7	7	6

^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Sources: All estimates from U.S. Bureau of the Census, *Current Population Reports*, Series P-20, "Household and Family Characteristics," various years.

Figure PF 1.3

Percentage of families in the United States with no children, and with four or more resident children: selected years, 1960-1997



Source: All estimates from U.S. Bureau of the Census, *Current Population Reports*, Series P-20, "Household and Family Characteristics," various years.

PF 1.4

RACIAL AND ETHNIC COMPOSITION OF THE CHILD POPULATION OF THE UNITED STATES

The United States has become increasingly racially and ethnically diverse over the last several decades and is projected to become even more so in the decades to come. As recently as 1980, nearly three-quarters (74 percent) of all children in this country were non-Hispanic whites (see Figure PF 1.4). This proportion diminished to 66 percent in 1996 and 1997, and is expected to continue a steady downward trend until, by the year 2020, non-Hispanic whites will constitute just over one-half (55 percent) of the U.S. child population.

Prior to 1997, non-Hispanic blacks were the largest minority population of children in the United States. In 1997, however, Hispanics and non-Hispanic blacks each constituted about 15 percent of the total child population, with slightly more Hispanic than black children (10.3 versus 10.2 million) (see Table PF 1.4). These were followed by non-Hispanic Asian Americans at 4 percent, and non-Hispanic Native Americans at 1 percent. By the year 2020, more than one in five American children are expected to be Hispanic, nearly double the proportion in 1990. The Asian American population is also expected to continue its rapid growth, increasing from 4 percent in 1997 to 6 percent by the year 2010.

Table PF 1.4

Percentage distribution and number (in millions) of children under age 18 in the United States, by race and Hispanic origin:^a selected years, 1980-1997, and projected, 2000-2020

	1980	1990	1996	1997	Projected		
					2000	2010	2020
Percent							
White, non-Hispanic	74	69	66	66	64	59	55
Black, non-Hispanic	15	15	15	15	15	16	16
Hispanic	9	12	14	15	16	19	22
Asian American, non-Hispanic ^b	2	3	4	4	4	6	6
Native American, non-Hispanic	1	1	1	1	1	1	1
Number (in millions)							
White, non-Hispanic	47.1	44.2	45.6	45.6	45.4	42.7	42.4
Black, non-Hispanic	9.3	9.5	10.2	10.2	10.6	11.3	12.2
Hispanic	5.7	7.9	10.0	10.3	11.0	13.7	17.2
Asian American, non-Hispanic ^b	1.1	2.0	2.6	2.7	3.1	4.0	5.0
Native American, non-Hispanic	0.5	0.6	0.7	0.7	0.7	0.7	0.8

^aPersons of Hispanic origin may be of any race. Estimates for whites, blacks, Asian Americans, and Native Americans exclude persons of Hispanic origin.

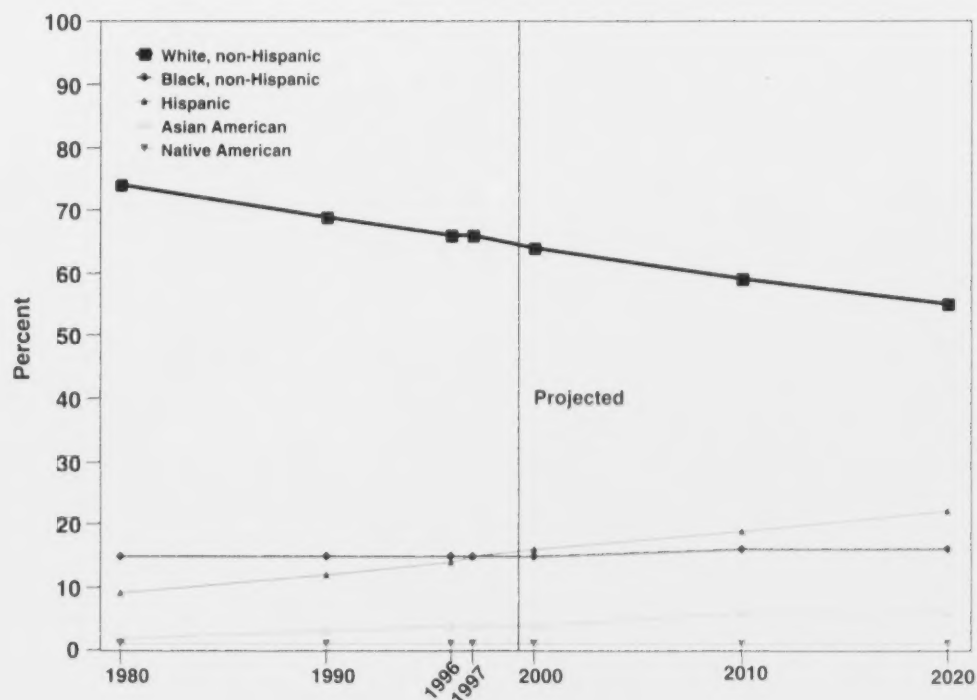
^bIncludes Pacific Islanders.

^cIncludes Alaskan Natives.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 1095, Table 1; and No. 1130, Table 2; also unpublished data, U.S. Bureau of the Census.

Figure PF 1.4

Percentage distribution of children under age 18 in the United States, by race and Hispanic origin:^a selected years, 1980-1997, and projected, 2000-2020



^aPersons of Hispanic origin may be of any race. Estimates for whites, blacks, Asian Americans, and Native Americans exclude persons of Hispanic origin.

Source: U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 1095, Table

PF 1.5

IMMIGRANT CHILDREN

The United States is a nation of immigrants. Rates of immigration have varied substantially over periods of our history, as have the countries and cultures from which these immigrants originate. Recently, the United States has been experiencing a period of high immigration. Immigrant children are of particular interest, since they may have special needs that must be addressed through the education system.

The percentage of America's children and youth under age 20 who are foreign born has been increasing steadily over the last several decades, from 1.2 percent in 1970 to 3.7 percent in 1990 (see Figure PF 1.5.A).

Differences by Age. Older children are more likely than younger children to be foreign born. In 1990, 6.5 percent of youth ages 15 through 19 were foreign born, compared with only 1.4 percent of children under age 5 (see Table PF 1.5.A).

Differences by Race and Hispanic Origin. The percentage of children and youth under age 20 who are foreign born varies substantially by racial and ethnic background (see Figure PF 1.5.B). In 1980, less than 2 percent of whites, blacks, and Native Americans were foreign born, compared with 40 percent of Asians and 14 percent of Hispanics. By 1990, the percentage of foreign-born Asian children had declined from 40 to 33.2 percent, while the percentage of foreign-born Hispanic children increased to almost 16 percent. More recent data for children under age 18 show a similar pattern, though differences in both data source and age range prevent direct comparison with earlier data (see Table 1.5.B).

Table PF 1.5.A

Percentage of children under age 20 in the United States who were foreign born,^a by age, and by race and Hispanic origin:^b 1970, 1980, and 1990

	1970	1980	1990
All Children	1.2	2.9	3.7
Under age 5	0.6	1.4	1.4
Ages 5-9	1.1	2.6	2.7
Ages 10-14	1.4	3.2	4.3
Ages 15-19	1.8	4.1	6.5
Race and Hispanic origin			
White	1.2	1.7	1.8
Black	0.5	1.8	2.2
Native American, Eskimo, and Aleut	—	1.5	1.1
Asian and Pacific Islander	—	40.0	33.2
Hispanic	—	14.0	15.8

^aIncludes both immigrants and illegal aliens.

^bPersons of Hispanic origin may be of any race. Estimates for whites, blacks, Asians, and Native Americans include persons of Hispanic origin.

Sources: U.S. Bureau of the Census, *National Origin and Language*, PC(2-1A), 1970; U.S. Bureau of the Census, *Detailed Characteristics of the Population*, 1980, Chapter D, U.S. Summary; U.S. Bureau of the Census, *The Foreign-Born Population in the U.S.*, 1990, CP-3-1, and 1990 STF-3A census files.

Table PF 1.5.B

Percentage of children under age 18 in the United States who were foreign born,^a by race and Hispanic origin:^b 1994-1996

	1994	1995	1996
All Children	4	4	4
Race and Hispanic origin			
White	3	3	3
Black	2	2	2
Asian/Pacific Islander	25	28	27
Hispanic	14	14	13

^aIncludes both immigrants and illegal aliens.

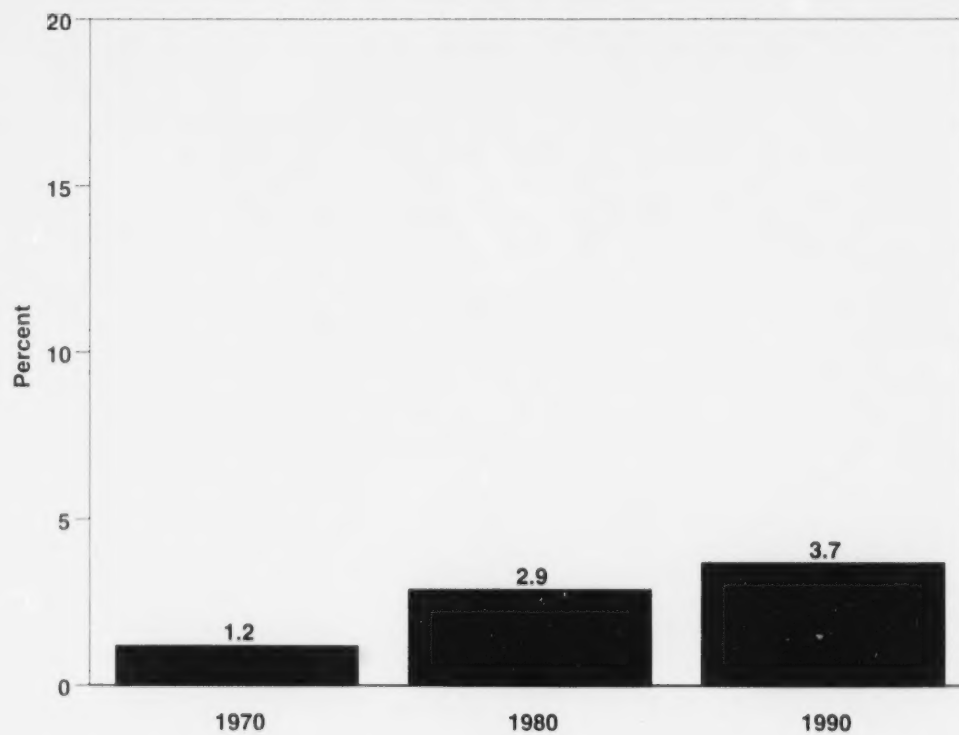
^bPersons of Hispanic origin may be of any race. Estimates for whites, blacks, and Asians include persons of Hispanic origin.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 486, Tables 1 and 2; U.S. Bureau of the Census, Paper Listing, Series PPL-58, *The Foreign-Born Population, 1995, Detailed Tables*, Tables 1 and 2; U.S. Bureau of the Census, Paper Listing, Series PPL-59, *The Foreign-Born Population, 1996, Detailed Tables*, Tables 1 and 2. All percentages calculated by Child Trends, Inc., based on number estimates from these sources.

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Figure PF 1.5.A

Percentage of children under age 20 in the United States who were foreign born:^a
1970-1990

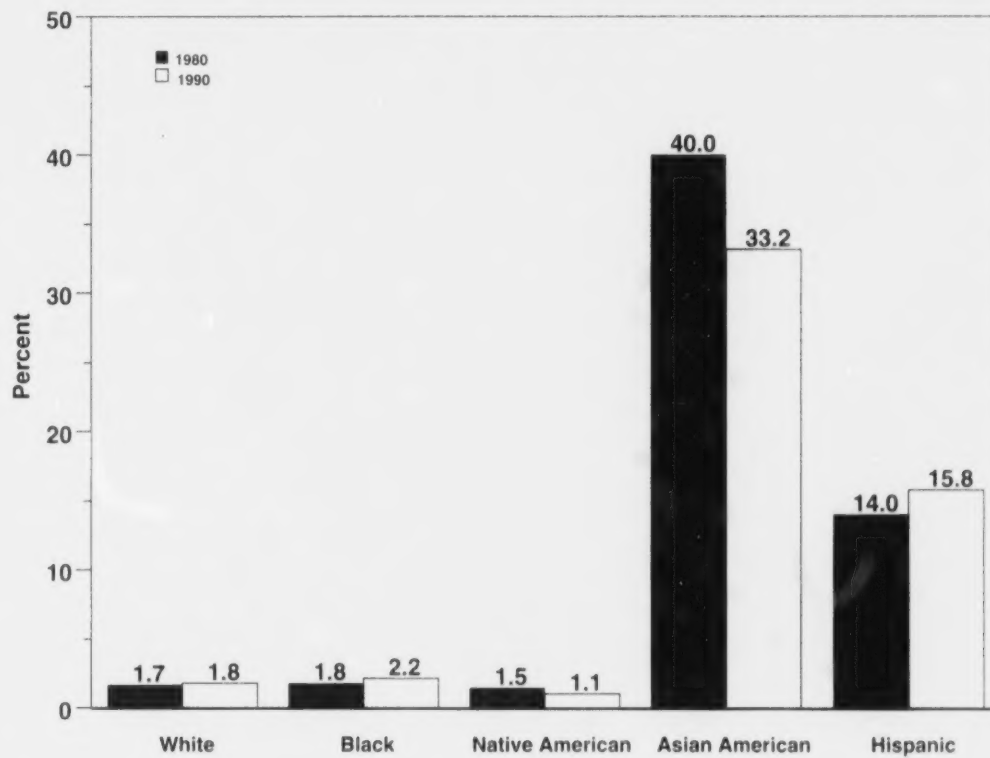


^aIncludes both immigrants and illegal aliens.

Source: U.S. Bureau of the Census, *National Origin and Language*, PC(2-1A), 1970; U.S. Bureau of the Census, *Detailed Characteristics of the Population*, 1980, Chapter D, U.S. Summary; U.S. Bureau of the Census, *The Foreign-Born Population in the U.S.*, 1990, CP-3-1, and 1990 STF-3A census files.

Figure PF 1.5.B

Percentage of children under age 20 in the United States who were foreign born,^a by race and Hispanic origin:^b 1980 and 1990



^aIncludes both immigrants and illegal aliens.

^bPersons of Hispanic origin may be of any race. Estimates for whites, blacks, Asian Americans, and Native Americans include persons of Hispanic origin.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 486, Tables 1 and 2; U.S. Bureau of the Census, Paper Listing, Series PPL-58, *The Foreign-Born Population, 1995, Detailed Tables*, Tables 1 and 2; U.S. Bureau of the Census, Paper Listing, Series PPL-59, *The Foreign-Born Population, 1996, Detailed Tables*, Tables 1 and 2. All percentages calculated by Child Trends, Inc., based on number estimates from these sources.

PF 1.6

CHILDREN AS A PERCENTAGE OF THE DEPENDENT POPULATION

Children and senior citizens are less likely than other age groups to fully support themselves through participation in the labor market. Varying proportions of both the child population and the elderly population therefore receive income transfers, health care, and other services through public programs. This indicator looks at children (under age 18) as a percentage of the dependent population (children under age 18 and adults ages 65 and older).

Children's share of the dependent population fell from 79 percent in 1960 to 67 percent in 1990, and has remained unchanged since then (see Table PF 1.6). By the year 2010, however, that percentage is projected to decline to 65 percent.

Differences by Race and Hispanic Origin.¹ The trend toward a larger senior population, relative to the child population, is occurring among all racial and ethnic groups. Between 1980 and 1990, the number of children declined as a percentage of the dependent population across all racial and ethnic groups (see Figure PF 1.6). Population projections for 2010 suggest that there will be even more seniors relative to children in each group at that time.

Yet there are also considerable differences across groups in the number of children relative to senior citizens. There are far fewer white children relative to white senior citizens than there are minority children relative to minority seniors. In 1997, white children were estimated to make up about 61 percent of the white dependent population. Blacks are closest to whites, with children making up 79 percent of the combined child and elderly population total. Among Hispanics, children outnumber seniors by the greatest margin, with children estimated to account for 86 percent of the dependent population.

Table PF 1.6

Children in the United States as a percentage of the dependent population (persons ages 17 and under and ages 65 and over), by race and Hispanic origin:^a selected years, 1960-1997, and projected 2010

	Estimated		1980	1990	1996	1997	Projected
	1960	1970					2010
All children under age 18	79	78	71	67	67	67	65
White, non-Hispanic	—	—	68	62	61	61	57
Black	—	—	82	79	79	79	78
Hispanic	—	—	89	87	86	86	83
Asian American ^b	—	—	88	85	81	80	76
Native American ^c	—	—	84	82	84	84	79

^aPersons of Hispanic origin may be of any race. Estimates for blacks, Asian Americans, and Native Americans include persons of Hispanic origin.

^bIncludes Pacific Islanders.

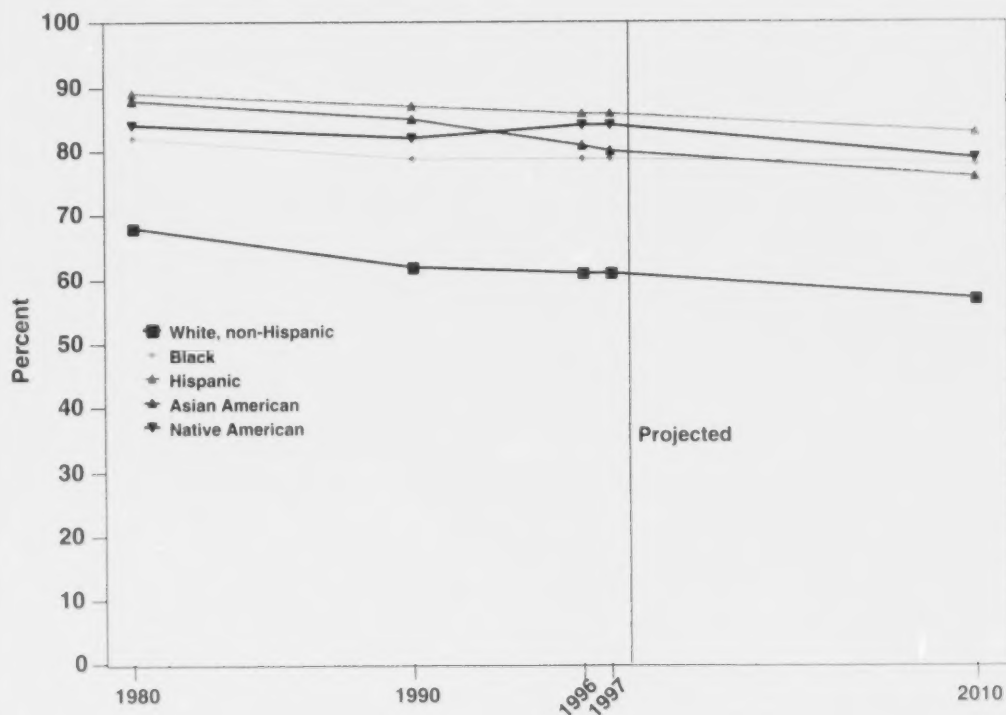
^cIncludes Alaskan Natives.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 1095, Table 1; and No. 1130, Table 2; also unpublished data, U.S. Bureau of the Census.

¹Estimates for whites exclude Hispanics of that race.

Figure PF 1.6

Children in the United States as a percentage of the dependent population (persons ages 17 and under and ages 65 and over), by race and Hispanic origin:^a selected years, 1980-1997, and projected for 2010.



^aPersons of Hispanic origin may be of any race. Estimates for blacks, Asian Americans, and Native Americans include persons of Hispanic origin.

Source: U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 1095, Table 1; and No. 1130, Table 2; also unpublished data, U.S. Bureau of the Census.

PF 1.7

FERTILITY RATE AND NUMBER OF BIRTHS

Changes in the fertility rate can have important consequences for society as it is a major determinant of overall population growth and the age structure of the population.

The fertility rate in the United States dropped dramatically between 1960 and 1980 from 118.0 to 68.4 per 1000 women ages 15 to 44 (see Figure PF 1.7.A). Since 1980 the rate has leveled off at between 66 and 71 per 1,000. The preliminary estimate for 1996 is 65.7 births per 1,000. The number of births also dropped between 1960 and 1980 from about 4.3 million to 3.6 million (see Table PF 1.7.B). In 1996 there were about 3.9 million births.

Differences by Race and Hispanic Origin. In recent years, Hispanic women have had much higher fertility rates than women from the major race groups. Preliminary estimates for 1996 indicate that Hispanic women have a rate of 104.4 per 1,000, while white,² black, Asian, and American Indian women have rates that vary between 65 and 71 per 1,000 (see Table PF 1.7.A).

Differences by Women's Age. The number and the percentage of all births to older women has increased substantially since 1980 (see Table PF 1.7.B and Figure PF 1.7.B). In 1980, 20 percent of all births were to women ages 30 to 44. By 1996 that had risen to 35 percent.

Differences by Women's Education. In 1995, 23 percent of all births were to women lacking high school degrees, and 21 percent were to women with four or more years of college (see Table PF 1.7.B).

²Rates for non-Hispanic whites are even lower at 58 per 1,000 women ages 15 to 44 compared to 64 per 1,000 for all whites in 1995.

Table PF 1.7.A

Fertility rates in the United States by race and Hispanic origin and age of mother (births per 1,000 females in each age group): selected years, 1960-1996

	1960 ^a	1970 ^a	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^b
All races											
All ages^c	118.0	87.9	68.4	66.3	70.9	69.6	68.9	67.6	66.7	65.6	65.7
Ages 15-19	89.1	68.3	53.0	51.0	59.9	62.1	60.7	59.6	58.9	56.8	54.7
Ages 20-24	258.1	167.8	115.1	108.3	116.5	115.7	114.6	112.6	111.1	109.8	111.1
Ages 25-29	197.4	145.1	112.9	111.0	120.2	118.2	117.4	115.5	113.9	112.2	113.9
Ages 30-34	112.7	73.3	61.9	69.1	80.8	79.5	80.2	80.8	81.5	82.5	84.5
Ages 35-39	56.2	31.7	19.8	24.0	31.7	32.0	32.5	32.9	33.7	34.3	35.4
Ages 40-44	15.5	8.1	3.9	4.0	5.5	5.5	5.9	6.1	6.4	6.6	6.8
White^d											
All ages^c	113.2	84.1	65.6	64.1	68.3	67.0	66.5	65.4	64.9	64.4	64.7
Ages 15-19	79.4	57.4	45.4	43.3	50.8	52.8	51.8	51.1	51.1	50.1	48.4
Ages 20-24	252.8	163.4	111.1	104.1	109.8	109.0	108.2	106.9	106.2	106.3	107.9
Ages 25-29	194.9	145.9	113.8	112.3	120.7	118.8	118.4	116.6	115.5	114.8	117.0
Ages 30-34	109.6	71.9	61.2	69.9	81.7	80.5	81.4	82.1	83.2	84.6	87.0
Ages 35-39	54.0	30.0	18.8	23.3	31.5	31.8	32.2	32.7	33.7	34.5	35.7
Ages 40-44	14.7	7.5	3.5	3.7	5.2	5.2	5.7	5.9	6.2	6.4	6.7
Black^d											
All ages^c	153.5	115.4	84.7	78.8	86.8	85.2	83.2	80.5	76.9	72.3	70.8
Ages 15-19	156.1	140.7	97.8	95.4	112.8	115.5	112.4	108.6	104.5	96.1	91.7
Ages 20-24	295.4	202.7	140.0	135.0	160.2	160.9	158.0	152.6	146.0	137.1	137.3
Ages 25-29	218.6	136.3	103.9	100.2	115.5	113.1	111.2	108.4	104.0	98.6	98.3
Ages 30-34	137.1	79.6	59.9	57.9	68.7	67.7	67.5	67.3	65.8	64.0	63.3
Ages 35-39	73.9	41.9	23.5	23.9	28.1	28.3	28.8	29.2	28.9	28.7	29.0
Ages 40-44	21.9	12.5	5.6	4.6	5.5	5.5	5.6	5.9	5.9	6.0	6.1
Hispanic^{e,f}											
All ages^c	—	—	95.4	—	107.7	108.1	108.6	106.9	105.6	105.0	104.4
Ages 15-19	—	—	82.2	—	100.3	106.7	107.1	106.8	107.7	106.7	101.6
Ages 20-24	—	—	156.4	—	181.0	186.3	190.6	188.3	188.2	188.5	189.0
Ages 25-29	—	—	132.1	—	153.0	152.8	154.4	154.0	153.2	153.8	160.0
Ages 30-34	—	—	83.2	—	98.3	96.1	96.8	96.4	95.4	95.9	97.2
Ages 35-39	—	—	39.9	—	45.3	44.9	45.6	44.7	44.3	44.9	44.7
Ages 40-44	—	—	10.6	—	10.9	10.7	10.9	10.6	10.7	10.8	10.6
Asian/Pacific Islander^g											
All ages^c	—	—	73.2	68.4	69.6	67.6	67.2	66.7	66.8	66.4	66.6
Ages 15-19	—	—	26.2	23.8	26.4	27.4	26.6	27.0	27.1	26.1	25.4
Ages 20-24	—	—	93.3	83.6	79.2	75.2	74.6	73.3	73.1	72.4	72.4
Ages 25-29	—	—	127.4	123.0	126.3	123.2	121.0	119.9	118.6	113.4	112.0
Ages 30-34	—	—	96.0	93.6	106.5	103.3	103.0	103.9	105.2	106.9	109.8
Ages 35-39	—	—	38.3	42.7	49.6	49.0	50.6	50.2	51.3	52.4	52.4
Ages 40-44	—	—	8.5	8.7	10.7	11.2	11.0	11.3	11.6	12.1	12.2
American Indian^h											
All ages^c	—	—	82.7	78.6	76.2	75.1	75.4	73.4	70.9	69.1	69.8
Ages 15-19	—	—	82.2	79.2	81.1	85.0	84.4	83.1	80.8	78.0	75.1
Ages 20-24	—	—	143.7	139.1	148.7	144.9	145.5	139.8	134.2	132.5	136.1
Ages 25-29	—	—	106.6	109.6	110.3	106.9	109.4	107.6	104.1	98.4	100.5
Ages 30-34	—	—	61.8	62.6	61.5	61.9	63.0	62.8	61.2	62.2	63.7
Ages 35-39	—	—	28.1	27.4	27.5	27.2	28.0	27.6	27.5	27.7	28.7
Ages 40-44	—	—	8.2	6.0	5.9	5.9	6.1	5.9	5.9	6.1	6.3

^aBeginning in 1980, births have been tabulated by the race and ethnicity of the mother. Previously, births are tabulated by race of child, assigning a child to the race of the nonwhite parent, if any, or to the race of the father, if both are nonwhite. ^bData for 1996 are preliminary. ^cFertility rates computed by relating total births, regardless of age of mother, to women aged 15-44 years. ^dIncludes persons of Hispanic origin. ^ePersons of Hispanic origin may be of any race. ^fData for Hispanics have been available since 1978. ^g22 states reported Hispanic origin in 1980, representing 90 percent of the Hispanic population. ^hHispanic birth data was reported by 25 states and the District of Columbia in 1985. 48 states and District of Columbia in 1990, 49 states and the District of Columbia in 1991 and 1992, and all 50 states and the District of Columbia in 1993 through 1996. Rates in 1985 were not calculated for Hispanics because estimates for populations were not available.

Sources: Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46: 1, Supp. 2. Hyattsville, Md.: National Center for Health Statistics, 1997. Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Fetal Natality Statistics, 1995." *Monthly Vital Statistics Report* 43: 11, Supp. 2. Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report; Ventura, S.J. "Births of Hispanic Parentage, 1980." *Monthly Vital Statistics Report* 32: 6, Supp. Hyattsville, Md.: National Center for Health Statistics, 1983.

Table PF 1.7.B

Number of births in the United States by mother's age, race and Hispanic origin, marital status, and education level: selected years, 1960-1996

	1960 ^a	1970 ^a	1980	1985	1990	1995	1996 ^b
Age of mother							
All Ages	4,257,850	3,731,386	3,612,258	3,760,561	4,158,212	3,899,589	3,914,953
Ages 15-19	586,966	644,708	552,161	467,485	521,826	499,873	494,272
Ages 20-24	1,426,912	1,418,874	1,226,200	1,141,320	1,093,730	965,547	951,247
Ages 25-29	1,092,816	994,904	1,108,291	1,201,350	1,277,108	1,063,539	1,078,411
Ages 30-34	687,722	427,806	550,354	696,354	886,063	904,666	904,329
Ages 35-39	359,908	180,244	140,793	214,336	317,583	383,745	400,810
Ages 40-44	91,564	49,952	23,090	28,334	48,607	67,250	71,663
Race and Hispanic Origin^c							
White	3,600,744	3,091,264	2,936,351	3,037,913	3,290,273	3,098,885	3,113,014
Black	602,264	572,362	568,080	581,824	684,336	603,139	596,039
Hispanic ^d	—	—	307,163	372,814	595,073	679,768	697,829
Marital Status							
Married	4,033,550	3,332,686	2,946,511	2,932,387	2,992,828	2,645,613	2,647,570
Unmarried ^e	224,300	398,700	665,747	828,174	1,165,384	1,253,976	1,267,383
Education Level							
Less than high school	—	—	—	—	—	867,552	—
Completed high school	—	—	—	—	—	1,307,228	—
At least some college	—	—	—	—	—	845,110	—
Four or more years of college	—	—	—	—	—	820,325	—

^aBirths from 1980 onwards by race of mother. Tabulations prior to 1980 are by race of child, which assigns the child to the race of the nonwhite parent, if any, or to the race of the father, if both are nonwhite.

^bData for 1996 are preliminary.

Estimates for white and black mothers include Hispanics of those races. Persons of Hispanic origin may be of any race.

^cBirths by Hispanic origin in 1980 are based on data from 22 States which report Hispanic origin on the birth certificate; 23 States and the District of Columbia in 1985; 48 States and the District of Columbia in 1990; and 50 States and the District of Columbia in 1995 and 1996.

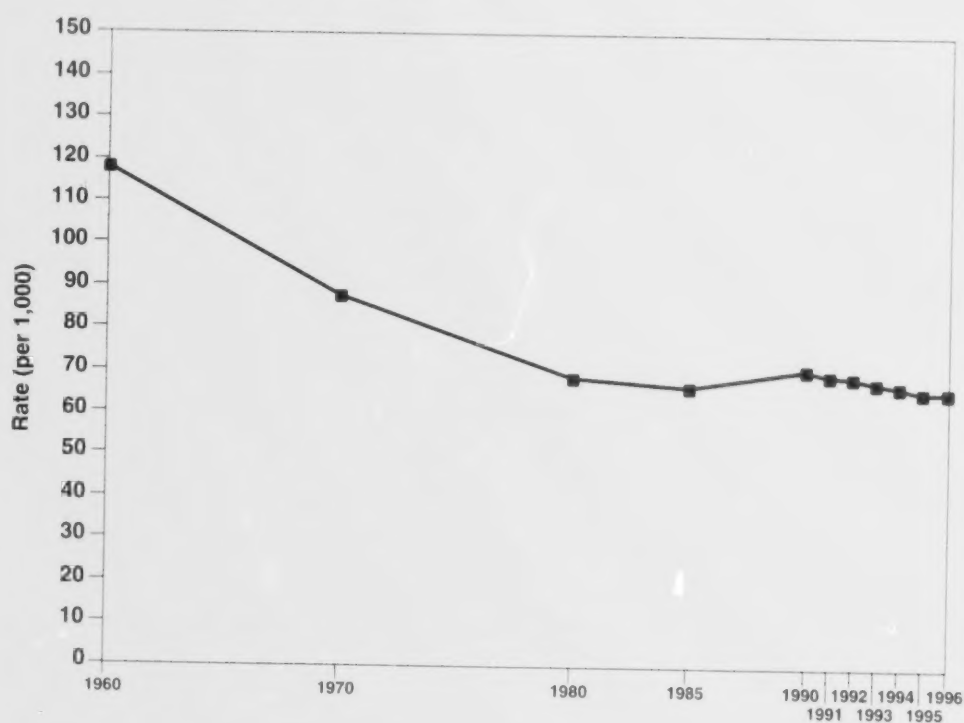
^dFrom 1980 onwards, data for states in which marital status was not reported have been inferred and included with data from the remaining states. Prior to 1980, births by marital status are estimated for the United States from registration areas in which marital status of mother was reported. See Report of Final Natality Statistics, 1995, referenced below.

Sources: Ventura S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; National Center for Health Statistics. *Vital Statistics of the United States, 1990, Vol. I, Natality*. Washington, D.C.: Public Health Service, 1994. Also the 1985, 1980, and 1970 editions of this annual report; National Center for Health Statistics. "Advance Report of Final Natality Statistics, 1985." *Monthly Vital Statistics Report* 36 (4, Supp. 1). Hyattsville, Md.: Public Health Service, 1987; National Center for Health Statistics. "Advance Report of Final Natality Statistics, 1980." *Monthly Vital Statistics Report* 31 (8, Supp. 1). Hyattsville, Md.: Public Health Service, 1982; Ventura, S.J. "Births of Hispanic Parentage, 1980." *Monthly Vital Statistics Report* 32 (6, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1983; National Center for Health Statistics. "Summary Report Final Natality Statistics, 1970." *Monthly Vital Statistics Report* 22 (12, Supp.). Rockville, Md.: Public Health Service, 1974.

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Figure PF 1.7.A

Overall fertility rate (per 1,000 women ages 15-44 years)^a in the United States: selected years, 1960-1996^b



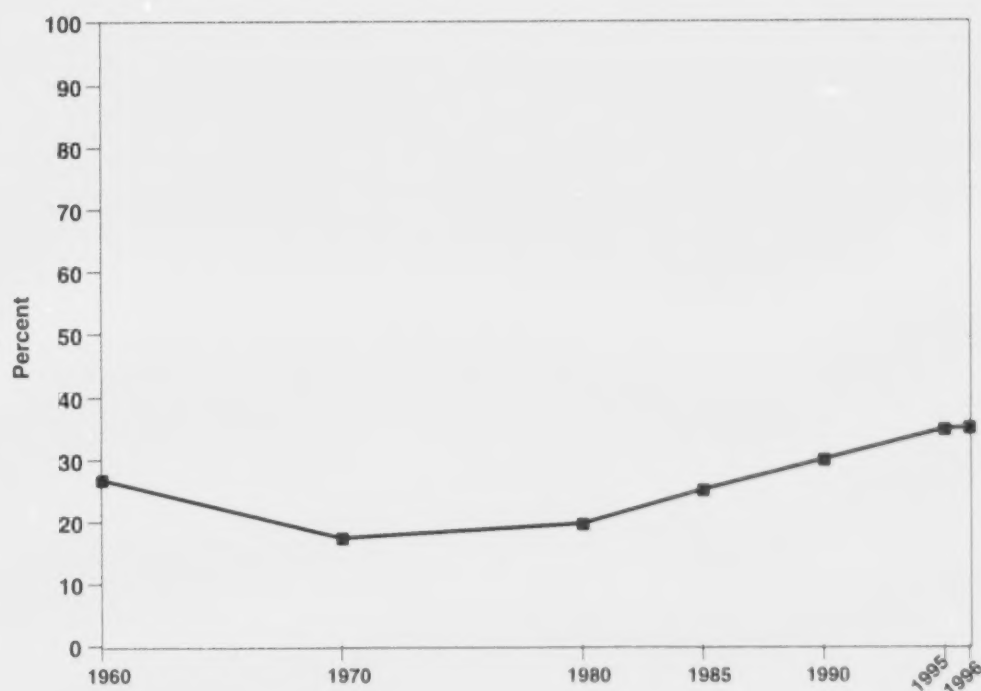
^aFertility rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

^bData for 1996 are preliminary.

Sources: Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics. 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics. 1997. Also previous issues of this annual report; Ventura, S.J. "Births of Hispanic Parentage, 1980." *Monthly Vital Statistics Report* 32 (6, Supp.). Hyattsville, Md.: National Center for Health Statistics. 1983.

Figure PF 1.7.B

Percentage of all births in the United States to women ages 30 through 44, selected years: 1960-1996^a



^aData for 1996 are preliminary.

Sources: Ventura S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics. 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; National Center for Health Statistics. *Vital Statistics of the United States*, 1990, Vol. I, Natality. Washington, D.C.: Public Health Service. 1994. Also the 1985, 1980, and 1970 editions of this annual report; National Center for Health Statistics. "Advance Report of Final Natality Statistics, 1985." *Monthly Vital Statistics Report* 36 (4, Supp.). Hyattsville, Md.: Public Health Service. 1987; National Center for Health Statistics. "Advance Report of Final Natality Statistics, 1980." *Monthly Vital Statistics Report* 31 (8, Supp.). Hyattsville, Md.: Public Health Service. 1982; Ventura, S.J. "Births of Hispanic Parentage, 1980." *Monthly Vital Statistics Report* 32 (6, Supp.). Hyattsville, Md.: National Center for Health Statistics. 1983; National Center for Health Statistics. "Summary Report Final Natality Statistics, 1970." *Monthly Vital Statistics Report* 22 (12, Supp.). Rockville, Md.: Public Health Service. 1974.

PF 2.1

PERCENTAGE DISTRIBUTION OF CHILDREN IN THE UNITED STATES BY NUMBER OF PARENTS IN HOUSEHOLD

Family structure is one of many factors that contributes to child well-being. It also is associated with the well-being of the child as an adult. For example, children from disrupted families or families where the parents never married are somewhat more likely to use alcohol and drugs, to become teen parents, and to achieve lower earnings than are children from intact families, and they are less likely to attain a high school diploma. These associations are evident even after controlling for family socioeconomic status, race, and other background factors;¹ nevertheless, the great majority of children brought up in single-parent families do well. In particular, differences in well-being between children from divorced and those from intact families tend, on average, to be moderate to small.²

Between 1970 and 1997, the proportion of children in two-parent families (about 84 percent of whom live with both biological parents present)³ decreased from 85 percent to 68 percent (see Figure PF 2.1).

In 1997, 24 percent of children lived with mother only; 4 percent lived with father only;⁴ and 4 percent lived with neither parent (see Table PF 2.1.A).⁵ Of those who lived with neither parent, more than one half were residing with one or more grandparents (see Table 2.1.C).

Differences by Race and Hispanic Origin. The decrease in the proportion of children living in two-parent families is evident for black, white, and Hispanic children, though the decline is somewhat steeper for black children. Between 1970 and 1997, the proportion of black children living in two-parent families fell by 23 percentage points, from 58 percent to 35 percent. The drop for white children was 15 percentage points, from 90 percent to 75 percent. For Hispanic children, the percentage living in two-parent families decreased from 78 percent to 64 percent.

Table PF 2.1.B presents 1980 and 1990 census data for Asian and Native American families in addition to data on white, black, and Hispanic families. The percentage of children living in two-parent families dropped for all five groups during that period. In 1990, Asian children were the most likely to live in a two-parent household (84 percent), followed closely by whites (82 percent), then Hispanics (71 percent), Native Americans (64 percent), and blacks (47 percent).

¹Amato, P.R. 1993. "Children's Adjustment to Divorce: Theories, Hypotheses, and Empirical Support." *Journal of Marriage and the Family* 55:23-58.

²Zill, N., Morrison, D., and Coiro, M. 1993. "Long-term Effects of Parental Divorce on Parent-Child Relationships: Adjustment and Achievement in Early Adulthood." *Journal of Family Psychology* 7(1):91-103.

³Analyses by Child Trends, Inc., of the 1993 Survey of Income and Program Participation indicates that 84 percent of children in married-couple families live with both biological parents (see Table PF 2.1.C).

⁴The Current Population Survey overestimates the proportion of children living in father-only families, because it identifies many cohabiting biological parent couples as father-only. Though the precise size of the overestimate is not known, analyses of the 1993 Survey of Income and Program Participation indicates that a little over two percent of all children actually lived in father-only families in that year (see Table PF 2.1.C).

⁵Data from the 1996 Current Population Survey (not shown) indicate that 11 percent of all children under age 18 who are living in families, live with single parents who are divorced. See Saloner, A. 1997. *PPL 66, Household and Family Characteristics: March 1996 (Update)*.

Table PF 2.1.A

Percentage distribution of living arrangements of children under age 18 in the United States, by race and Hispanic origin:^a selected years, 1970-1997

	1970	1980	1990	1991	1992	1993	1994	1995	1996	1997
Total										
Two parents	85	77	73	72	71	71	69	69	68	68
Mother only	11	18	22	22	23	23	23	23	24	24
Father only	1	2	3	3	3	3	3	4	4	4
No parent	3	4	3	3	3	3	4	4	4	4
White										
Two parents	90	83	79	78	77	77	76	76	75	75
Mother only	8	14	16	17	18	17	18	18	18	18
Father only	1	2	3	3	3	3	3	3	4	4
No parent	2	2	2	2	2	2	3	3	3	3
Black										
Two parents	58	42	38	36	36	36	33	33	33	35
Mother only	30	44	51	54	54	54	53	52	53	52
Father only	2	2	4	4	3	3	4	4	4	5
No parent	10	12	8	6	7	7	10	11	9	8
Hispanic										
Two parents	78	75	67	66	65	65	63	63	62	64
Mother only	—	20	27	27	28	28	28	28	29	27
Father only	—	2	3	3	4	4	4	4	4	4
No parent	—	3	3	4	3	4	5	4	5	5

^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 410, No. 461, No. 468, No. 478, No. 491 (Table 4 in each); and No. 484, Table A-5; also unpublished data, U.S. Bureau of the Census.

Table PF 2.1.B

Percentage distribution of families in the United States with own children under age 18, by race and Hispanic origin,^a and family structure: 1980 and 1990

	1980	1990
Total		
Married couple	81.5	77.1
Female head	16.1	17.7
Male head	2.4	4.1
White		
Married couple	85.7	82.2
Female head	12.1	14.0
Male head	2.2	3.7
Black		
Married couple	54.3	46.9
Female head	41.7	47.6
Male head	4.0	5.5
Hispanic		
Married couple	76.6	71.4
Female head	20.4	22.1
Male head	3.1	6.5
Asian American^b		
Married couple	88.5	84.3
Female head	9.4	9.8
Male head	2.1	2.9
Native American^c		
Married couple	71.5	63.6
Female head	24.2	28.7
Male head	4.3	7.8

^aPersons of Hispanic origin may be of any race. Estimates for whites, blacks, Asian Americans, and Native Americans include persons of Hispanic origin.

^bIncludes Pacific Islanders.

^cIncludes Alaskan Natives.

Sources: "The Challenge of Change: What the 1990 Census Tells Us About Children," Table 14, prepared by the Population Reference Bureau for the Center for the Study of Social Policy; with data from the U.S. Bureau of the Census, 1980 Census of Population, "General Social and Economic Characteristics," PC80-1-C1, United States Summary, Tables 100, 121, and 131; and Census of Population and Housing 1990, Summary Tape File 3, Tables P-19, P-20, and P-21.

Table PF 2.1.C

Percentage distribution of children under age 18 in the United States in two-parent, one-parent or no-parent, families by age, race and Hispanic origin, poverty status, and parent's education level: 1993

	Two Parent Families			Single Parent Families			No Parents Present	
	Total ^a	Biological Parents	One Biological One Step Parent	Total ^a	Biological Mother	Biological Father	Total ^a	Grand-parents
All children	70.8	59.8	7.1	26.5	22.6	2.1	2.4	1.5
Ages 0-5	72.8	67.4	1.8	25.4	22.5	1.2	1.8	1.3
Ages 6-11	70.8	58.9	7.9	26.7	22.8	1.9	2.4	1.8
Ages 12-17	68.8	52.3	12.2	27.5	22.4	3.2	3.2	1.6
Race and Hispanic origin^b								
White, non-Hispanic	80.1	67.8	8.2	18.4	15.2	2.2	1.4	0.9
Black, non-Hispanic	35.9	28.2	4.4	56.9	48.9	2.2	7.1	4.7
Hispanic	61.5	52.9	5.6	35.3	32.6	1.4	2.7	1.6
Poverty Status^c								
Below poverty	37.1	31.1	3.5	58.4	52.4	1.9	4.2	2.5
At or above poverty	80.6	68.2	8.2	17.2	13.9	2.1	1.9	1.2
Parent's Education Level								
Less than high school	45.2	38.7	4.3	54.8	47.3	2.6		
Completed high school	67.8	55.8	8.1	32.2	27.2	2.8		
At least some college	76.5	63.1	9.4	23.5	20.3	1.9		
Four or more years of college	90.3	79.1	6.2	9.7	7.8	1.3		

^aTotals for two-parent, one-parent, and no-parent families include categories beyond those presented separately.

^bEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

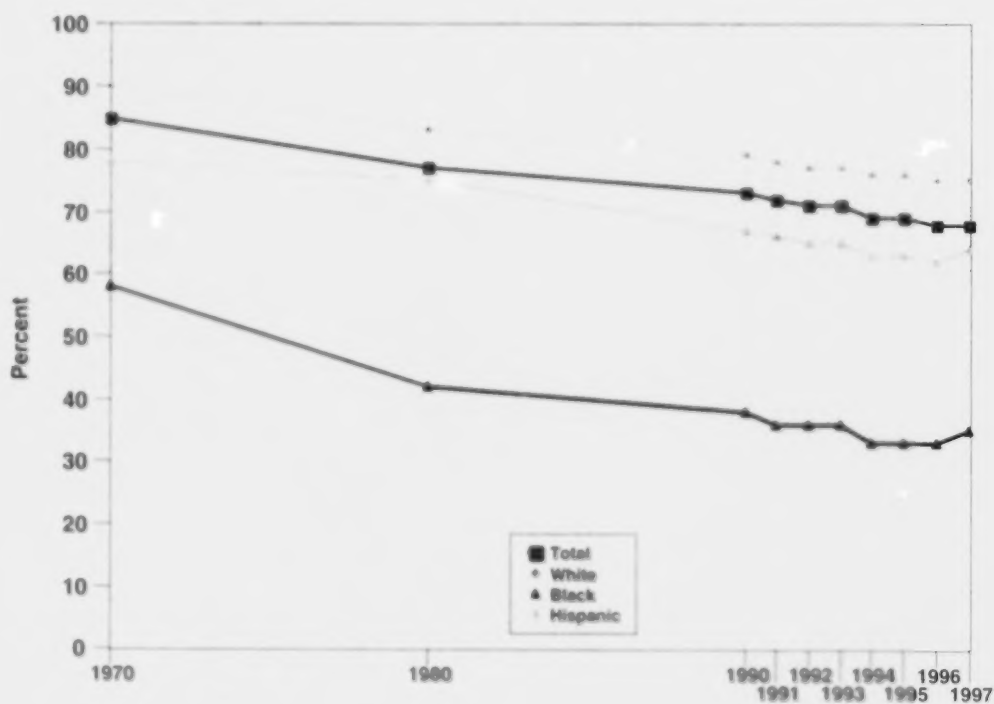
^cEducation level in two-parent families is determined by the higher educated parent.

Source: Survey of Income and Program Participation, 1993. Analysis by Child Trends, Inc.

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Figure PF 2.1

Percentage of children under age 18 in the United States who are living with two parents, by race and Hispanic origin:^a selected years, 1970-1997



^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Source: U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 410, No. 461, No. 468, No. 478, No. 491 (Table 4 in each); and No. 484, Table A-5; also unpublished data, U.S. Bureau of the Census.

PF 2.2

PERCENTAGE OF ALL BIRTHS TO UNMARRIED WOMEN

Children who are born to single women -- regardless of the age of the women -- are considerably more likely than children born to two parents to grow up poor, to spend large portions of their childhood without two parents, and to become single parents themselves.⁸

Between 1960 and 1994, there was a considerable increase in the percentage of all births to unmarried women -- from 5.3 percent in 1960 to 32.6 percent in 1994 (see Figure PF 2.2). The percentage has been fairly stable in the last several years, and was 32.4 percent in 1996.⁹

Differences by Age. Nonmarital childbearing increased among women of all age groups between 1960 and 1994 before dropping off modestly in 1995 (see Table PF 2.2). Younger mothers are far more likely than older mothers to be unmarried. In 1995, 75.2 percent of births to women ages 15 through 19 were to unmarried women. In contrast, 44.7 percent of births to women ages 20 through 24 were to unmarried women, and only 14.7 percent of births to women ages 30 through 34 were to unmarried women.

Contrary to popular opinion, nonmarital childbearing does not occur primarily among teenagers. In 1995, about 31 percent of nonmarital births were to teenagers (women under age 20), about 34 percent were to women ages 20 through 24, and 35 percent were to women ages 25 and older.¹⁰

Differences by Race and Hispanic Origin. The percentage of all births to unmarried women increased steadily for whites, blacks, and Hispanics between 1980 and 1994, before declining for all groups in 1995.¹¹ Preliminary data for 1996, however, indicate that whites have resumed their upward trend at 25.7 percent. Among Asian and American Indian women, percentages have increased steadily between 1980 and 1995, the years for which data are available for these groups.

In 1995, Asian and white women had the lowest percentage of nonmarital births at 16.3 and 25.3 percent, respectively.¹² Hispanics were next at 40.8 percent, followed by American Indian and black women at 57.2 percent and 69.9 percent, respectively. This ordering is the same for most age groups, though the size of the difference can vary substantially by the age of the mother. For young women ages 15 through 19 in 1995, for example, whites and Hispanics have very similar percentages of births to unmarried women -- 67.7 and 67.3 percent, respectively -- while the percentage among young black women ages 15 through 19 is much higher at 95.2 percent. By ages 25 through 29, however, percentages for Hispanic women move midway between white and black rates, with whites at 16.4 percent, Hispanics at 31.1 percent, and blacks at 56.8 percent (see Table PF 2.2).

⁸See Ventura, S.J. 1995. *Births to Unmarried Mothers: United States, 1980-1992*. NCHS Series 21, No. 53, U.S. Department of Health and Human Services. See also McLanahan, S., and Sandefur, G. 1994. *Growing Up with a Single Parent: What Hurts, What Helps*. Cambridge, Mass.: Harvard University Press.

See also U.S. Department of Health and Human Services. 1995. *Report to Congress on Out-of-Wedlock Childbearing*. DHHS Publication Number (PHS) 95-1257. Hyattsville, MD.

⁹Data for 1996 are preliminary.

¹⁰Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11 Supp.). Hyattsville, Md.: National Center for Health Statistics, 1997.

¹¹Data are available for whites from 1960 and for blacks from 1970, indicating that the percentage of births that were nonmarital had also been increasing prior to 1980 for those races. Data for Hispanics are only available starting in 1980.

¹²Percentages for non-Hispanic whites (not shown) are even lower at 21.2 percent in 1995.

Table PF 2.2

Percentage of all births to unmarried women in the United States, by race and Hispanic origin^a and by age: selected years, 1960-1996^b

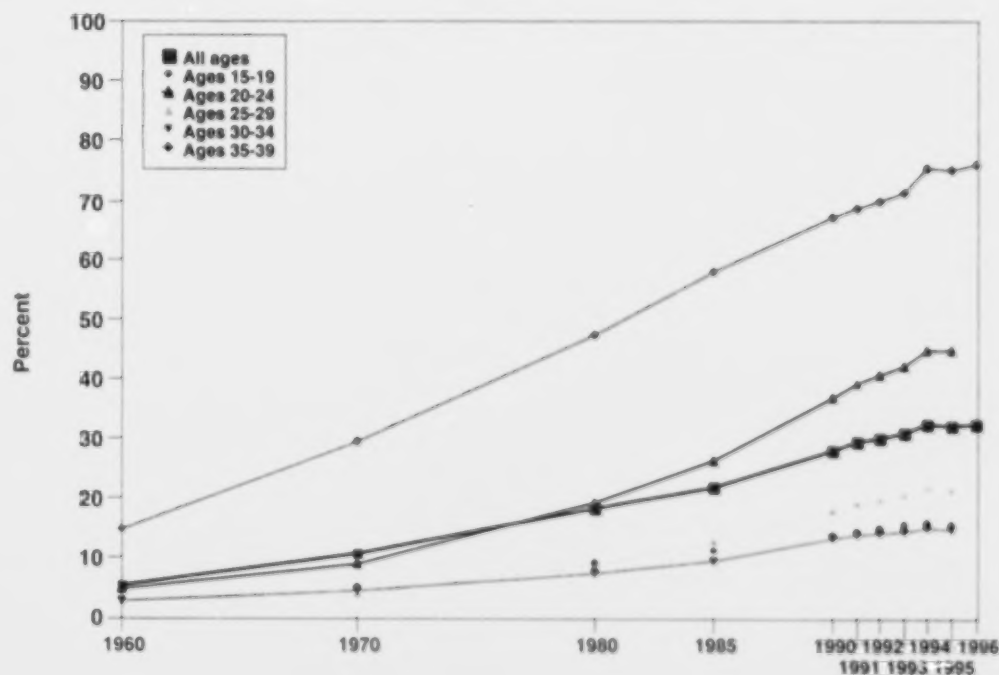
	1960	1970	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^c
All races											
All ages	5.3	10.7	18.4	22.0	28.0	29.5	30.1	31.0	32.6	32.2	32.4
Ages 15-19	14.8	29.5	47.6	58.0	67.1	68.8	70.0	71.3	75.5	75.2	76.0
Ages 20-24	4.8	8.9	19.4	26.3	36.9	39.4	40.7	42.2	44.9	44.7	—
Ages 25-29	2.9	4.1	9.0	12.7	18.0	19.2	19.8	20.7	21.8	21.5	—
Ages 30-34	2.8	4.5	7.5	9.7	13.3	14.0	14.3	14.7	15.1	14.7	—
Ages 35-39	3.0	5.2	9.4	11.2	13.9	14.6	15.2	15.6	16.1	15.7	—
White^d											
All ages	2.3	5.7	11.2	14.7	20.4	21.8	22.6	23.6	25.5	25.3	25.7
Ages 15-19	7.2	17.1	33.1	44.8	56.4	58.8	60.4	62.3	67.6	67.7	68.8
Ages 20-24	2.2	5.2	11.7	17.7	27.8	30.2	31.7	33.4	36.3	36.5	—
Ages 25-29	1.1	2.1	5.2	8.1	12.6	13.7	14.3	15.2	16.5	16.4	—
Ages 30-34	1.0	2.1	4.6	6.3	9.3	9.8	10.2	10.6	11.1	10.9	—
Ages 35-39	1.3	2.7	6.4	8.1	10.3	10.9	11.4	11.7	12.3	12.0	—
Black^d											
All ages	—	37.6	56.1	61.2	66.5	67.9	68.1	68.7	70.5	69.9	69.8
Ages 15-19	—	62.7	85.7	90.2	92.0	92.3	92.6	92.9	95.3	95.2	95.4
Ages 20-24	—	31.3	57.0	65.4	72.6	74.7	75.2	76.7	79.0	79.1	—
Ages 25-29	—	20.3	36.8	45.2	53.3	54.7	55.0	55.8	57.3	56.8	—
Ages 30-34	—	19.6	29.6	37.0	45.2	46.5	46.7	46.9	47.4	46.5	—
Ages 35-39	—	18.6	28.4	35.1	42.0	43.8	44.7	44.8	45.8	45.3	—
Hispanic^e											
All ages	—	—	23.6	29.5	36.7	38.5	39.1	40.0	43.1	40.8	40.9
Ages 15-19	—	—	41.9	51.3	53.7	61.2	61.9	62.8	69.7	67.3	68.1
Ages 20-24	—	—	23.8	30.9	35.1	41.5	42.3	43.4	47.0	45.0	—
Ages 25-29	—	—	15.9	22.2	25.7	30.3	30.8	31.7	33.2	31.1	—
Ages 30-34	—	—	15.2	19.6	23.0	26.6	27.2	27.5	28.6	26.4	—
Ages 35-39	—	—	16.2	20.8	23.2	27.6	28.5	29.0	30.3	27.4	—
Asian/Pacific Islander^d											
All ages	—	—	7.3	9.5	13.2	13.9	14.7	15.7	16.2	16.3	—
Ages 15-19	—	—	40.6	47.7	57.0	58.4	59.6	60.7	62.7	63.1	—
Ages 20-24	—	—	10.9	15.5	23.5	25.1	27.0	29.0	30.0	30.1	—
Ages 25-29	—	—	4.2	5.7	8.3	8.8	9.6	10.6	11.3	12.1	—
Ages 30-34	—	—	3.0	4.6	6.3	6.4	7.1	7.7	8.0	8.0	—
Ages 35-39	—	—	4.0	5.8	7.5	7.9	8.4	9.0	8.8	8.9	—
American Indian^d											
All ages	—	—	39.2	46.8	53.6	55.3	55.3	55.8	57.0	57.2	—
Ages 15-19	—	—	61.9	72.5	78.9	79.1	80.3	80.6	82.9	82.5	—
Ages 20-24	—	—	38.6	48.5	57.2	58.7	58.6	59.5	60.6	60.7	—
Ages 25-29	—	—	28.1	35.9	43.2	45.2	45.3	45.2	45.5	45.7	—
Ages 30-34	—	—	22.2	31.8	38.3	39.0	39.6	40.0	40.6	40.6	—
Ages 35-39	—	—	22.5	27.7	35.5	38.8	38.2	38.1	38.5	40.6	—

^aPersons of Hispanic origin may be of any race. - Births from 1980 onward by race of mother. Tabulations prior to 1980 are by race of child, which assigns the child to the race of the nonwhite parent, if any, or to the race of the father, if both are nonwhite. - Data for 1996 are preliminary. - Includes persons of Hispanic origin.

Sources: Ventura, S.J. "Births to Unmarried Mothers: United States, 1980-1992." *Vital and Health Statistics*, Series 21, No. 53. U.S. Department of Health and Human Services, Public Health Service, 1995; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 1). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report; Ventura, S.J. "Births of Hispanic Parentage, 1985." *Monthly Vital Statistics Report* 36 (11, Supp.). Hyattsville, Md.: Public Health Service; Ventura, S.J. "Births of Hispanic Parentage, 1980." *Monthly Vital Statistics Report* 32 (6, Supp.). Hyattsville, Md.: Public Health Service, 1983; unpublished data from S. Ventura, National Center for Health Statistics.

Figure PF 2.2

Percentage of all births to unmarried women in the United States, by age: selected years, 1960-1996^a



^aData for 1996 are preliminary.

Sources: Ventura, S.J. "Births to Unmarried Mothers: United States, 1980-1992." *Vital and Health Statistics*, Series 21, No. 53. U.S. Department of Health and Human Services, Public Health Service. 1995; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 1). Hyattsville, Md.: National Center for Health Statistics. 1997. Also previous issues of this annual report; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics. 1997. Also previous issues of this annual report; Ventura, S.J. "Births of Hispanic Parentage, 1985." *Monthly Vital Statistics Report* 36 (11, Supp.). Hyattsville, Md.: Public Health Service; Ventura, S.J. "Births of Hispanic Parentage, 1980." *Monthly Vital Statistics Report* 32 (6, Supp.). Hyattsville, Md.: Public Health Service. 1983; unpublished data from S. Ventura, National Center for Health Statistics.

PF 2.3

CHILDREN LIVING IN FOSTER CARE¹³

A child is placed in foster care when a court determines that his or her family cannot provide a minimally safe environment. This determination often follows an investigation by a state or county child protective services worker. Placement most commonly occurs either because a member of a household has physically or sexually abused a child, or because a child's caretaker(s) has severely neglected the child. In some cases, children with severe emotional disturbances may also be put into foster care.

Since both federal and state laws discourage removal of children from their families unless necessary to ensure a child's safety, placement in foster care is an extreme step taken only when a child is in immediate danger or when attempts to help the family provide a safe environment have failed; thus, the frequency of placements in foster care is an indicator of family dysfunction that is so severe that a child cannot remain safely with his or her family.

The number of children in foster care rose sharply from 262,000 in 1982 to 483,000 in 1995. Estimates for 1996 indicate a further increase to 507,000. As shown in Figure PF 2.3, the rate of children living in foster care (i.e., the number of children in foster care per thousand children under age 18) also rose dramatically during the same time period, from 4.2 per thousand children under age 18 in 1982 to 7 per thousand in 1995, with preliminary data for 1996 showing an increase to 7.3 per thousand.

Table PF 2.3

Number and rate (per 1,000) of children in the United States living in foster care: 1982-1996

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Total number															
(in thousands)	262	269	276	276	280	300	340	383	400	414	427	445	468	483	507
Rate															
(per thousand)	4.2	4.3	4.3	4.3	4.5	4.8	5.4	6.0	6.3	6.4	6.5	6.6	6.8	7.0	7.3

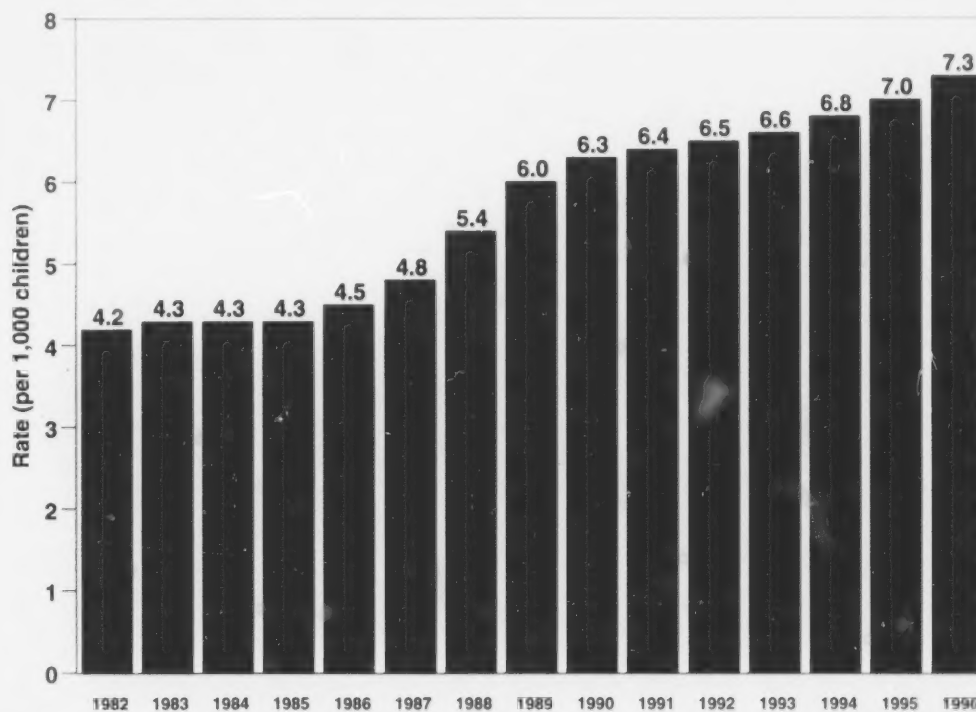
Note: Estimate of total is the number of children in foster care on the last day of the fiscal year. 1996 is the last year in which data on foster care was collected through the Voluntary Cooperative Information System (VCIS). The Administration on Children and Families (ACF) has implemented the Adoption and Foster Care Analysis and Reporting System (AFCARS) as a replacement for VCIS. While VCIS was a voluntary reporting system, states are required to participate in AFCARS and must use uniform definitions. Most importantly, AFCARS collects case-level foster care data. The first release of data from AFCARS shows no significant change in estimates of children in foster care.

Sources: Tatara, Tashio, VCIS Research Notes, No. 11, August 1995, and VCIS Research Notes, No. 13, March 1997; U.S. Bureau of the Census, *Statistical Abstract of the United States, 1996*. Washington, D.C.: U.S. Government Printing Office, 1996.

¹³For purposes of this report "foster care" is defined as a living arrangement where a child resides outside his or her own home, under the case management and planning responsibility of a state child welfare agency. These living arrangements include relative and nonrelative foster homes, group homes, child care facilities, emergency shelter care, supervised independent living, and nonfinalized adoptive homes.

Figure PF 2.3.

Children in the United States living in foster care (rate per 1,000 children): 1982-1996



Note: Estimate of total is the number of children in foster care on the last day of the fiscal year. 1996 is the last year in which data on foster care was collected through the Voluntary Cooperative Information System (VCIS). The Administration on Children and Families (ACF) has implemented the Adoption and Foster Care Analysis and Reporting System (AFCARS) as a replacement for VCIS. While VCIS was a voluntary reporting system, states are required to participate in AFCARS and must use uniform definitions. Most importantly, AFCARS collects case-level foster care data. The first release of data from AFCARS shows no significant change in estimates of children in foster care.

Sources: Tatara, Tashio, VCIS Research Notes, No. 11, August 1995, and VCIS Research Notes, No. 13, March 1997; U.S. Bureau of the Census, *Statistical Abstract of the United States*, 1996. Washington, D.C.: U.S. Government Printing Office, 1996.

PF 3.1

RESIDENTIAL STABILITY: PERCENTAGE OF CHILDREN UNDER AGE 18¹⁴ WHO HAVE MOVED WITHIN THE LAST YEAR

Research has demonstrated a strong relationship between residential stability and child well-being, with frequent moves associated with such negative outcomes as dropping out of high school, delinquency, depression, and nonmarital teen births. Some researchers theorize that these negative associations may result from a lack of rootedness in a local community and its institutions on the part of frequent movers.¹⁵

The United States has long been a highly mobile society. In 1960, 21 percent of children under the age of 18 had moved to a new residence during the previous year. The general trend since that time has been toward somewhat lower rates of mobility, with a rate of 18 percent in 1996 (see Table PF 3.1.A).

Differences by Age. Young children were the most mobile of any child age group (see Table PF 3.1.B). In 1996, 25 percent of children between the ages of 1 and 4 had changed residences in the previous year, compared with 18 percent among children ages 5 through 9, 15 percent for ages 10 through 14, and 13 percent for youth ages 15 through 17.

Differences by Race and Hispanic Origin. For all children under age 18 in 1996, white children were the least mobile, with 17 percent moving during the previous year compared with 22 percent of black children and 23 percent of Hispanic children.

Table PF 3.1.A

Percentage of children in the United States under age 18^a who have moved within the last year: selected years, 1960-1996

	1960	1970	1981	1990	1991	1992	1993	1994	1996
Total	21	19	18	18	17	18	17	17	18

^aEstimates are based on children ages 1 and older at time of survey.

Source: U.S. Bureau of the Census, *Current Population Reports*, Series P-20, "Geographic Mobility," various years; Estimates for 1996 from "Geographic Mobility, Detailed Tables," P20-497u.

¹⁴ Estimates are based on children ages 1 and older at time of survey.

¹⁵ Wood, D., Halfon, N., Scarlata, D., Newacheck, P., and Nessim, S. 1993. "Impact of Family Relocation on Children's Growth, Development, School Function, and Behavior." *Journal of the American Medical Association* 270:1334-1338.
Coleman, J. 1988. "Social Capital and the Creation of Human Capital." *American Journal of Sociology* 94:s95-s120.

Table PF 3.1.B

Percentage of children in the United States under age 18^a who have moved within the last year, by age and by race and Hispanic origin:^b 1990-1996^c

	1990	1991	1992	1993	1994	1996
All children						
All ages	18	17	18	17	17	18
Ages 1-4	24	23	22	23	22	25
Ages 5-9	19	18	18	17	17	18
Ages 10-14	15	14	15	14	13	15
Ages 15-17	15	15	14	14	15	13
White children						
All ages	18	17	17	16	16	17
Ages 1-4	23	22	21	22	21	24
Ages 5-9	18	17	17	16	16	18
Ages 10-14	14	13	15	13	12	14
Ages 15-17	14	14	14	14	13	12
Black children						
All ages	21	21	21	20	20	22
Ages 1-4	26	26	27	26	25	29
Ages 5-9	22	22	22	20	22	22
Ages 10-14	19	17	18	17	16	18
Ages 15-17	18	16	16	14	18	14
Hispanic children						
All ages	25	21	24	23	21	23
Ages 1-4	32	27	27	28	26	31
Ages 5-9	28	20	25	24	20	23
Ages 10-14	18	19	21	19	15	18
Ages 15-17	21	19	19	20	21	19

^aEstimates are based on children ages 1 and older at time of survey.

^bPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

^cEstimates for 1995 are not available.

Source: U.S. Bureau of the Census, *Current Population Reports*, Series P-20, "Geographic Mobility," various years; Estimates for 1996 from "Geographic Mobility, Detailed Tables," P20-497a.

PF 3.2

CHILDREN IN POOR AND VERY POOR NEIGHBORHOODS

Recent research has demonstrated a significant relationship between neighborhood quality and the well-being of the children and youth who live in them. Even after controlling for relevant personal and family background characteristics, residence in a low-income neighborhood has been shown to have negative effects on early childhood development and to be associated with higher rates of dropping out of high school and teen parenthood.¹⁶

Overall, in 1990, one in 20 American children lived in a very poor neighborhood – defined as a census tract – in which 40 percent or more of the residents live in poor families.¹⁷ More than one in five children lived in neighborhoods in which 20 percent or more of the residents live in poor families (see Table PF 3.2).

Differences by Race and Hispanic Origin. Black children were the most likely to live in very poor neighborhoods, followed by Hispanic children, and – at a much lower rate – white children. Almost 19 percent of black children live in very poor neighborhoods, compared to 11.3 percent of Hispanic children and 1.2 percent of white children (see Figure PF 3.2).

Differences by Family Structure. Children in single-parent families were much more likely to live in a very poor neighborhood than were children in two-parent families (12.5 percent versus 2.7 percent) (see Figure PF 3.2).

Differences by Family Income. More than one in six poor children (17.5 percent) lived in very poor neighborhoods, compared with 2.3 percent of nonpoor children.

¹⁶Brooks-Gunn, J., Duncan, G., Klebanov, P., and Sealander, N. 1994. "Do Neighborhoods Influence Child and Adolescent Behavior?" *American Journal of Sociology* 99(2):353-395. See also Crane, J. 1991. "The Epidemic Theory of Ghettos and Neighborhood Effects on Dropping Out of High School and Teenage Childbearing." *American Journal of Sociology* 96(5):1126-1159.

¹⁷While trend data for children are not available, trends for the entire population show that between 1970 and 1990, the percent of all persons living in very poor neighborhoods increased from 3 percent to 4.5 percent, and the number nearly doubled from 4.1 million to 8 million. See Jargowsky, P.A. 1996. *Poverty and Place: Ghettos, Barrios, and the American City*, Table 2.1. New York: Russell Sage.

Table PF 3.2

Percentage of children in the United States who live in poor neighborhoods by age, family structure, family poverty status, race and Hispanic origin:^a 1990

	<u>Neighborhood Poverty Level</u>	
	<u>20+ % Poor</u>	<u>40+ % Poor</u>
Total	22.9	5.0
Age of child		
Under age 5	23.5	5.3
Ages 5-17	22.7	4.9
Family structure		
Two-parent	17.3	2.7
Single-parent	41.2	12.5
Family poverty		
Poor	54.6	17.5
Nonpoor	16.0	2.3
Race and Hispanic origin		
White, non-Hispanic and other	12.2	1.2
Black	56.4	18.6
Hispanic	46.6	11.3

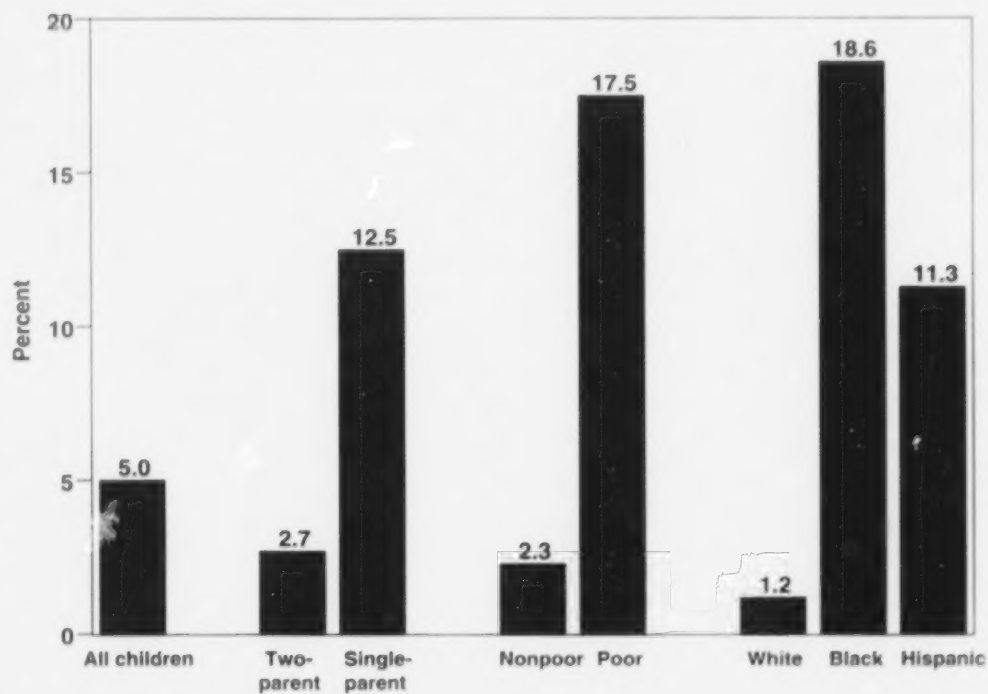
^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin. Estimates for whites also include all other persons not white, black, or Hispanic.

Note: Neighborhoods are defined as census tracts and block-numbering areas. Both metropolitan and nonmetropolitan areas are included. The poverty rate is the percentage of all persons in the neighborhood living in families below the federal poverty line in 1990.

Source: Tabulations by Paul A. Jargowski from 1990 Census Summary Tape File 3A (CD-ROM version).

Figure PF 3.2

Percentage of children in the United States who live in very poor (40+% poverty) neighborhoods, by family structure, family poverty status, and race and Hispanic origin:^a 1990



^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin. Estimates for whites also include all other persons not white, black, or Hispanic.

Note: Neighborhoods are defined as census tracts and block-numbering areas. Both metropolitan and nonmetropolitan areas are included. The poverty rate is the percent of all persons in the neighborhood living in families below the poverty line in 1990.

Source: Tabulations by Paul A. Jargowski from 1990 Census Summary Tape File 3A (CD-ROM version).



Economic Security

ES 1.1

MEDIAN FAMILY INCOME

Median income¹ of families with children is a good starting point for assessing the economic well-being of children since it measures the ability of a family at the midpoint of the income distribution to purchase food, shelter, clothing, child care, and other basic goods and services required to raise children.²

However, median family income fails to capture important economic resources that may also be available to a family, such as employer-paid health benefits, Medicaid, or food stamps; moreover, it says nothing about changes in the distribution of income across families. For a more complete picture of children's economic well-being, it is necessary to look at several measures of economic well-being, including those in the following sections.

Family Income Apparently Stagnant Since 1975. Between 1975 and 1996, median income of all families with children (in constant 1996 dollars)³ has fluctuated in a narrow range—never falling below \$39,300 and never rising above \$41,200 (see Figure ES 1.1); however, this apparent stagnation was in part the result of a shift in the living arrangements of families with children. As shown in Table PF 2.1.A, between 1970 and 1997 the percentage of children living in female-headed families increased from 11 percent to 24 percent. Since, as will be described in the next section, female-headed families have much lower incomes than two-parent families, this shift in living arrangements has depressed the median income of all families with children.

Family Income by Family Type. Throughout the period from 1975 through 1996, median income of female-headed families has never exceeded 35 percent of median income of two-parent families (see Figure ES 1.1). In 1996, the median family income of female-headed families was \$16,389, compared with \$51,768 for married-couple families with children.

Between 1990 and 1996, median income of single-parent families headed by men never exceeded 62 percent of median income of two-parent families (see Figure ES 1.1). In 1996, median income of single-parent families headed by men was \$26,501.

Although real median income of female-headed families was no higher in 1993 than in 1975, there has been a 12 percent increase in median income of female-headed families between 1993 and 1996. In contrast, median income of married-couple families has risen steadily throughout the period.⁴ Between 1975 and 1993, median income of married-couple families rose about 13 percent from \$43,904 to \$49,456. Between 1993 and 1996 their income continued to rise to \$51,768, an additional increase of nearly 5 percent.

Differences in Median Family Income by Race and Hispanic Origin. Median family incomes are substantially higher for white families with children than for black and Hispanic families with children. In 1996, whites enjoyed family incomes that were about 94 percent higher than black families, and 81 percent higher than Hispanic families (see Table ES 1.1).

Much of the black-white difference and some of the Hispanic-white difference in family income is due to the fact that black and Hispanic families are more likely than white families to be female-headed. As shown in Table PF 2.1.A, 53 percent of black children were being raised in female-headed families in 1996 compared with 29 percent of Hispanic children and only 18 percent of white children.⁵

¹Median income is the amount that divides the income distribution into two equal groups, half having incomes above the median, half having incomes below the median.

²When median family income is rising, the likelihood is that children in a typical family are enjoying a rising standard of living.

³In constructing income figures in constant 1996 dollars, we have followed the practice of the Bureau of the Census and used the CPI-U-X1 consumer price index. This index differs from the standard CPI-U index in its treatment of the costs of owner-occupied housing for years prior to 1986. After 1986 it is identical to the CPI-U.

⁴This is due in part to an increase in maternal employment. As shown in Table ES 3.2.A, between 1980 and 1996, the percentage of mothers who worked increased from 53 percent to 66 percent.

⁵Among single-parent families the black-white difference in family income was 33 percent, while among married-couple families the difference was 23 percent (see Table ES 1.1). Among single-parent families the Hispanic-white difference in family income was 61 percent, while among married-couple families the difference was 66 percent. Thus, over three-quarters of the Hispanic-white income difference remains even after taking into account differences in living arrangements (see Table ES 1.1).

Table ES 1.1

Median income of families in the United States with related children under age 18, by race and Hispanic origin^a and family structure (in constant 1996 dollars):^b selected years, 1975-1996

	1975	1980	1985 ^c	1990	1991	1992 ^d	1993	1994	1995	1996
All families	\$39,759	\$40,732	\$40,399	\$41,092	\$40,308	\$39,737	\$39,307	\$40,151	\$41,198	\$40,985
White	—	—	—	\$43,818	\$43,429	\$43,575	\$43,255	\$43,602	\$44,363	\$44,527
Black	—	—	—	\$23,240	\$21,682	\$20,752	\$20,273	\$22,669	\$23,340	\$22,912
Hispanic	—	—	—	\$26,414	\$25,417	\$25,350	\$24,015	\$24,398	\$23,748	\$24,619
Married-couple families	\$43,904	\$46,338	\$47,171	\$49,530	\$48,976	\$49,420	\$49,456	\$50,017	\$51,444	\$51,768
White	—	—	—	\$50,041	\$49,741	\$50,648	\$50,356	\$51,106	\$52,088	\$52,353
Black	—	—	—	\$42,882	\$40,732	\$40,658	\$39,805	\$44,556	\$45,244	\$42,697
Hispanic	—	—	—	\$32,982	\$31,445	\$31,737	\$30,945	\$31,163	\$30,549	\$31,612
Female householder, no husband present	\$15,313	\$16,136	\$14,693	\$15,716	\$14,990	\$14,838	\$14,628	\$15,777	\$16,714	\$16,389
White	—	—	—	\$17,849	\$17,871	\$17,558	\$17,395	\$17,716	\$18,633	\$18,139
Black	—	—	—	\$12,372	\$10,843	\$11,622	\$11,266	\$12,613	\$13,373	\$13,647
Hispanic	—	—	—	\$12,175	\$11,769	\$12,608	\$11,398	\$11,787	\$12,155	\$11,241
Male householder, no wife present	—	—	—	\$30,265	\$27,845	\$24,846	\$24,266	\$25,506	\$27,787	\$26,501
White	—	—	—	\$31,414	\$28,232	\$27,017	\$28,551	\$27,572	\$29,018	\$27,694
Black	—	—	—	\$24,687	\$24,099	\$20,096	\$20,475	\$20,231	\$22,973	\$22,227
Hispanic	—	—	—	\$24,940	\$22,097	\$17,369	\$19,365	\$18,370	\$20,080	\$22,553

^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

^bIncome statistics converted to constant 1996 dollars using the CPI-U-X1 (all items) price index. CPI-U-X1 is a rental equivalence approach to homeowners' costs for the consumer price index prior to 1983, the first year for which the official index (CPI-U) incorporates such a measure.

^cRecording of amounts for earnings from longest job increased to \$299,999.

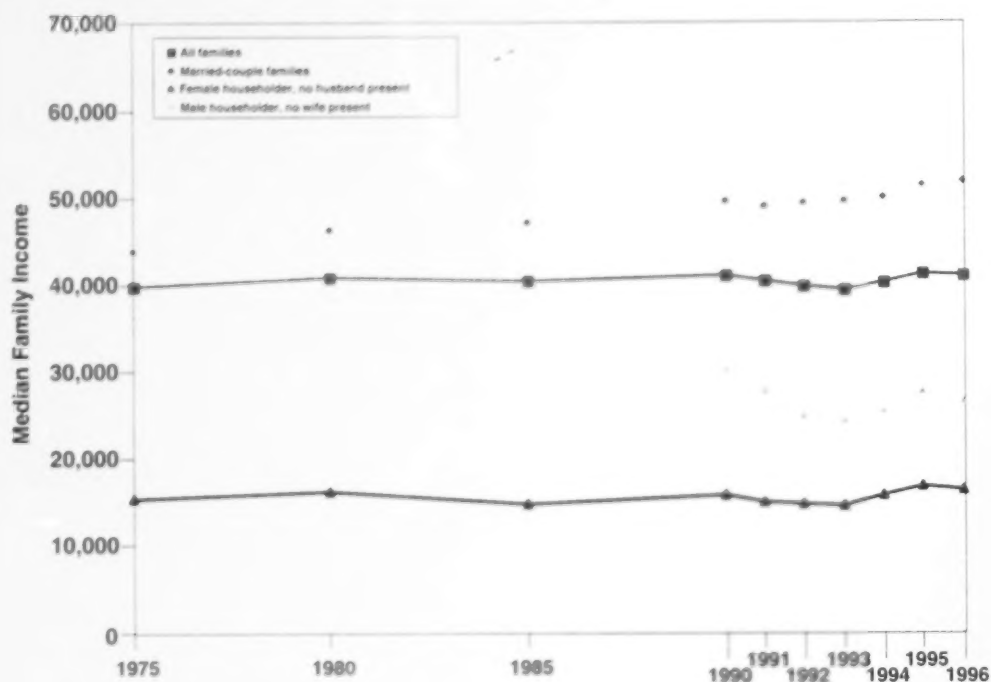
^dImplementation of 1990 census population controls.

Sources: Unpublished tabulations of the March Current Population Survey supplied by U.S. Bureau of the Census; Council of Economic Advisors, 1997. *Economic Report of the President, 1997*.

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Figure ES 1.1

Median income of families in the United States with related children under age 18, by family structure (in constant 1996 dollars):^a selected years, 1975-1996



^aIncome statistics converted to constant 1996 dollars using the CPI-U-X1 (all items) price index. CPI-U-X1 is a rental equivalence approach to homeowners' costs for the consumer price index prior to 1983, the first year for which the official index (CPI-U) incorporates such a measure.

Sources: Unpublished tabulations of the March Current Population Survey supplied by U.S. Bureau of the Census; Council of Economic Advisors, 1997. *Economic Report of the President, 1997*.

ES 1.2

THE INCOME DISTRIBUTION: THE INCOME-TO-POVERTY RATIO OF FAMILIES WITH CHILDREN, BY INCOME QUINTILE

Figures ES 1.2.A and ES 1.2.B present trends in the income of the poorest and richest families with children. The poorest families are those whose income falls in the bottom 20 percent (or bottom quintile) of all families; the richest families are those whose income falls in the top 20 percent of all families. The measure shown is the income-to-poverty ratio, the ratio of annual family income to the poverty line. For example, families whose pretax income was half of the poverty line would have a value of 0.50 for this measure. Each figure shows results separately by type of family.

Between 1967 and 1973 the income-to-poverty ratio of the poorest families increased from 0.74 to 0.88 (see Figure ES 1.2.A). By 1994, the ratio had dropped to 0.66.

Differences in the Income-to-Poverty Ratio by Family Type. The poorest single-mother families fared much worse than the poorest married-couple families (see Figure ES 1.2.A). After an increase from 0.21 to 0.33 between 1967 and 1973, the ratio for the poorest single-mother families dropped and was at 0.25 in 1994. The poorest married-couple families crossed over the poverty line between 1967 and 1973 (from 0.89 to 1.16, see Figure ES 1.2.A); however, since 1979, their ratio has declined, reaching 1.06 by 1994.

Difference in the Income-to-Poverty Ratio by Income Quintile. While the poorest families with children were getting poorer, the richest families with children were getting richer (see Figure ES 1.2.B). Between 1967 and 1994, the income-to-poverty ratio of the richest families increased from 4.77 to 7.14.

For the richest married-couple families, the picture was even brighter (see Figure ES 1.2.B). The income-to-poverty ratio increased from 4.88 to 7.68 between 1967 and 1994. The richest single-parent families headed by women were also well above the poverty line throughout the entire period. Their income-to-poverty ratio increased from 2.78 to 4.14 between 1967 and 1989 before declining to 4.02 in 1994.

Data for all five income quintiles show that the poorest families (the lowest quintile) were the only families to lose ground between 1967 and 1994 (see Table ES 1.2). For all time periods and all income groups, families headed by single mothers had considerably less income than those headed by married couples.

Table ES 1.2

The income-to-poverty ratio. Average pretax income as a multiple of poverty^a among families in the United States with children under age 18,^b by family structure and income quintile, 1967, 1973, 1979, 1989, 1992, and 1994

	1967	1973	1979	1989	1992	1994
Family type and income						
All families with children						
Lowest quintile	0.74	0.88	0.84	0.74	0.65	0.66
Second quintile	1.54	1.88	1.95	1.87	1.72	1.73
Middle quintile	2.13	2.65	2.84	2.93	2.77	2.79
Fourth quintile	2.84	3.54	3.85	4.14	4.00	4.09
Highest quintile	4.77	5.73	6.15	7.20	6.86	7.14
Total	2.40	2.94	3.13	3.38	3.20	3.28
Married couples with children						
Lowest quintile	0.89	1.16	1.18	1.14	1.07	1.06
Second quintile	1.66	2.12	2.29	2.34	2.25	2.26
Middle quintile	2.23	2.84	3.12	3.34	3.26	3.31
Fourth quintile	2.93	3.71	4.11	4.52	4.43	4.58
Highest quintile	4.88	5.94	6.41	7.67	7.36	7.68
Total	2.52	3.15	3.42	3.80	3.67	3.78
Single mothers with children						
Lowest quintile	0.21	0.33	0.32	0.25	0.23	0.25
Second quintile	0.59	0.71	0.75	0.64	0.58	0.62
Middle quintile	0.91	1.03	1.22	1.14	1.06	1.11
Fourth quintile	1.45	1.67	2.01	2.03	1.89	1.94
Highest quintile	2.78	3.29	3.65	4.14	3.81	4.02
Total	1.19	1.41	1.59	1.64	1.51	1.59

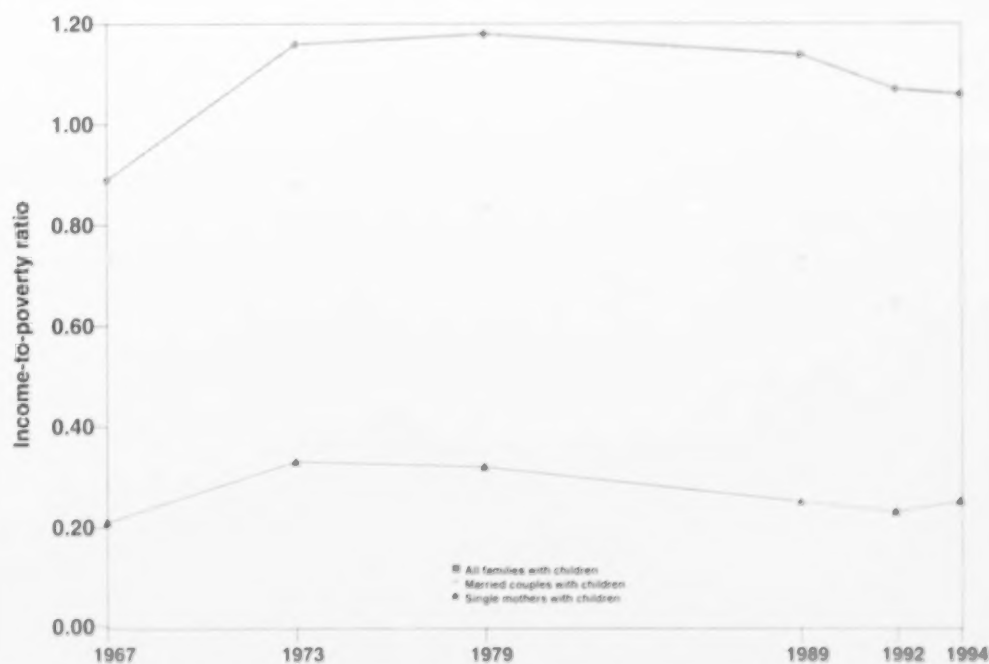
^aPoverty thresholds are based on the 1989 distribution of family sizes, with no adjustment for the age of the head of household or the number of children. Quintiles are based on the number of persons.

^bWeighted by persons.

Source: U.S. Congress, House Ways and Means Committee, 1994 and 1996 *Green Book*.

Figure ES 1.2.A

Income-to-poverty^a ratio for families in the United States with children under age 18, lowest income quintile, by family structure: selected years, 1967-1994

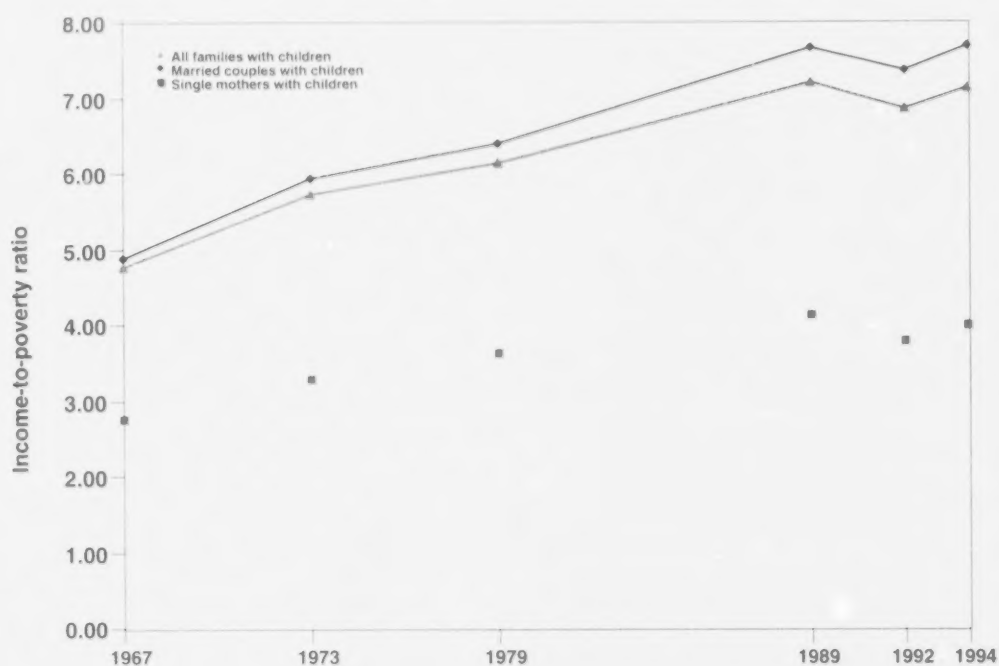


^aPoverty thresholds are based on the 1989 distribution of family sizes, with no adjustment for the age of the head of household or the number of children. Quintiles are based on the number of persons.

Source: U.S. Congress, House Ways and Means Committee, 1994 and 1996 *Green Book*.

Figure ES 1.2.B

Income-to-poverty^a ratio for families in the United States with children under age 18, highest income quintile, by family structure: selected years, 1967-1994



^aPoverty thresholds are based on the 1989 distribution of family sizes, with no adjustment for the age of the head of household or the number of children. Quintiles are based on the number of persons.

Source: U.S. Congress, House Ways and Means Committee, 1994 and 1996 *Green Book*.

ES 1.3

CHILDREN IN POVERTY

Being raised in economically deprived circumstances can have far-reaching negative consequences for children. Growing up at or near the poverty line (\$16,036 for a family of four in 1996) means not only that a child has a much lower level of consumption than other children, but also that he or she is more likely than a nonpoor child to experience difficulties in school,⁶ to become a teen parent,⁷ and, as an adult, to earn less and experience greater unemployment.⁸ The effects of being raised in a family with income significantly below the poverty line are correspondingly more damaging.

Children At, Below, and Slightly Above the Poverty Level. Figures ES 1.3.A and 1.3.B illustrate trends in the proportions of children living in various degrees of poverty and near-poverty.

- *Children in families with incomes below 50 percent of the poverty line.* Between 1975 and 1993, the proportion of children living in extreme poverty, that is, at or below 50 percent of the poverty line,⁹ doubled from 5 percent in 1975 to 10 percent by 1993. By 1996, this percentage dropped back to 8 percent (see Figure ES 1.3.A).
- *Children in families with incomes at or below the poverty line.* Less dramatic but still striking, the proportion of children at or below 100 percent of the poverty line increased by 29 percent from 17 percent in 1975 to 22 percent by 1993 before dropping to 20 percent in 1995 and 1996. The percentage of children living in poverty has remained at or above 20 percent since 1990 (see Figure ES 1.3.A).
- *Children above but near the poverty line.* In contrast, the proportion of children living at or below 150 percent of the poverty line was about the same in 1996 (31 percent) as it was in 1975 (30 percent). Similarly, as shown in the upper line of that figure, the proportion of children living at or below 200 percent of the poverty line in 1996 was 43 percent -- the same as in 1975.

Differences by Race and Hispanic Origin. There are no substantial differences by race or Hispanic origin in the trends described above, even though the percentage in poverty is consistently highest for blacks and lowest for whites (see Table ES 1.3.A). The increase in the percentage of children raised in extreme poverty occurred for all three groups, while the percentage of children raised at or below 200 percent of the poverty line has hardly changed at all.

⁶Parker, S., Greer, S., and Zuckerman, B. 1988. "Double Jeopardy: The Impact of Poverty on Early Childhood Development." *Pediatric Clinics of North America*, 35:1-10.

⁷An, C., Haveman, R., and Wolfe, B. 1993. "Teen Out-of-Wedlock Births and Welfare Receipt: The Role of Childhood Events and Economic Circumstances." *Review of Economics and Statistics*, 75:195-208.

⁸Duncan, G., and Brooks-Gunn, J. 1997. "Income Effects Across the Life Span: Integration and Interpretation." In *Consequences of Growing Up Poor* (G. Duncan and J. Brooks-Gunn, eds.). New York: Russell-Sage Press.

⁹Fifty percent of the poverty line was \$8,018 in 1996.

A more detailed (but less current) look at poverty by race and Hispanic origin, using data from the Decennial Census,¹⁰ shows that the incidence of poverty is lowest by far for white children and highest for black and Native American children (see Table ES 1.3.B and Figure ES 1.3.C). While the incidence of poverty grew noticeably between 1979 and 1989 for all groups, the differences between the groups remained stable:

- The poverty rate for white children was 12 percent in 1989.
- The poverty rate for Asian children was 17 percent in 1989, more than a third higher than for white children.
- The poverty rate for Hispanic children was 32 percent in 1989, a rate 2.6 times as high as for white children.
- The poverty rate for Native American children was 38 percent in 1989, slightly more than three times the poverty rate for white children.
- The poverty rate for black children was 40 percent in 1989, slightly more than three times the poverty rate for white children.

Although statistics on Hispanics commonly group all Hispanics together, the incidence of poverty for Hispanic children varies substantially by their place of origin. The three most common places of origin for Hispanics are Mexico, Puerto Rico, and Cuba.

According to data for 1992 from a third source (the Panel Study of Income Dynamics),¹¹ children of Cuban descent were substantially less likely than other Hispanic children to experience either poverty (16 percent for Cubans compared with 31 percent for all Hispanic children) or extreme poverty (6 percent for Cubans compared with 12 percent for all Hispanic children); however, children of Puerto Rican descent were substantially *more* likely than other Hispanic children to experience poverty (45 percent) or extreme poverty (17 percent).

Differences by Family Structure. The chances of a child experiencing poverty are strongly influenced by the type of family in which he or she lives. Throughout the period from 1970 through 1996, about half of the children living in female-headed families were poor (see Table ES 1.3.C). In contrast, during the 1990s,¹² only about 10 percent of children living in married-couple families were poor (see Figure ES 1.3.D).

¹⁰Poverty estimates presented in Table ES 1.3.B are based on the Decennial Census rather than the Current Population Survey, which is used in Table ES 1.3.A and many other tables in this section. Estimates from the two sources differ because the Current Population Survey has a much smaller sample than the Decennial Census.

¹¹The Panel Study of Income Dynamics excludes children who migrated to the United States after 1990. Consequently, it understates recent migrants' share of the Hispanic population. This is likely to lead to a lower estimate of child poverty than a more representative survey such as the Current Population Survey, which was used for Table ES 1.3.A.

¹²Statistics on children in married-couple families began to be published in 1990.

Table ES 1.3.A

Percentage of children in the United States under age 18 living below selected poverty^a thresholds, by age, and by race and Hispanic origin:^b selected years, 1975-1996

	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996
Under 50% of poverty										
Related children										
under age 18	5	7	8	8	9	10	10	9	8	8
White	4	5	6	6	6	6	6	6	6	6
Black	14	17	22	22	25	27	26	23	20	20
Hispanic	—	—	—	14	14	15	14	17	16	14
Under 100% of poverty										
Related children										
under age 18	17	18	20	20	21	22	22	21	20	20
White	13	13	16	15	16	17	17	16	16	16
Black	41	42	43	44	46	46	46	43	42	40
Hispanic	33	33	40	38	40	39	40	41	39	40
Under 150% of poverty										
Related children										
under age 18	30	29	32	31	32	33	33	32	32	31
White	24	24	26	25	26	27	27	27	26	26
Black	60	57	59	57	60	60	61	58	56	56
Hispanic	—	—	—	55	58	58	60	58	59	57
Under 200% of poverty										
Related children										
under age 18	43	42	43	42	43	44	44	43	43	43
White	38	37	38	37	38	38	38	38	37	37
Black	73	70	71	68	70	71	72	68	68	68
Hispanic	—	—	—	69	72	70	72	72	73	72

^aThe poverty level is based on money income and does not include noncash benefits, such as Food Stamps. Poverty thresholds reflect family size and composition and are adjusted each year using the annual average Consumer Price Index (CPI) level. The average poverty threshold for a family of four was \$16,036 in 1996. The levels shown here are derived from the ratio of the family's income to the family's poverty threshold. Related children include biological children, stepchildren, and adopted children of the householder and all other children in the household related to the householder (or reference person) by blood, marriage, or adoption.

^bPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Sources: Rates for 1975, 1980, and 1985 were calculated by Child Trends, Inc., based on data from the U.S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 106, Table 7; No. 133, Table 7; No. 158, Table 4; Rates for 1990 through 1996 are from the U.S. Bureau of the Census, *Current Population Reports*, Series P-60, Nos. 175, 185, 188, 189, 194, and 198, and revised data for 1992 provided by the U.S. Bureau of the Census, Poverty and Health Branch.

Table ES 1.3.B

Percentage of children in the United States under age 18 living below the poverty level,^a by race and Hispanic origin:^b 1979 and 1989

	1979	1989
All children under age 18	16	18
White	11	12
Black	38	40
Hispanic	29	32
Asian	15	17
Native American	33	38

^aThe poverty level is based on money income and does not include noncash benefits, such as Food Stamps. Poverty thresholds reflect family size and composition and are adjusted each year using the annual average Consumer Price Index (CPI) level. The average poverty threshold for a family of four was \$16,036 in 1996. The levels shown here are derived from the ratio of the family's income to the family's poverty threshold. Related children include biological children, stepchildren, and adopted children of the householder and all other children in the household related to the householder (or reference person) by blood, marriage, or adoption.

^bPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Sources: U.S. Bureau of the Census, 1980 Census of the Population, "Detailed Population Characteristics," PC-80-1-D1-A, United States Summary, Table 304; U.S. Bureau of the Census, 1990 Census of the Population, "Social and Economic Characteristics," CP-2-1, United States Summary, Table 49.

Table ES 1.3.C

Percentage of children in the United States under age 18 living below the poverty level,^a by family structure, age, and race and Hispanic origin:^b selected years, 1960-1996

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996
All types of families with related children under age 18	27	21	15	17	18	20	20	21	22	22	21	20	20
White	20	14	11	13	13	16	15	16	17	17	16	16	16
Black	—	—	42	41	42	43	44	46	46	46	43	42	40
Hispanic	—	—	—	—	33	40	38	40	39	40	41	39	40
Asian	—	—	—	—	—	—	—	—	—	18	—	19	—
Related children under age 6	—	—	17	18	20	23	23	24	26	26	25	24	23
White	—	—	12	14	16	18	18	19	20	20	19	18	18
Black	—	—	42	41	46	47	51	51	53	52	49	49	45
Hispanic	—	—	—	—	34	41	40	44	43	43	44	42	42
Related children ages 6-17	—	—	14	16	17	19	18	20	19	20	20	18	18
White	—	—	10	12	12	14	14	15	15	15	15	14	14
Black	—	—	41	42	40	41	41	43	43	43	40	38	37
Hispanic	—	—	—	—	32	39	36	37	37	38	39	37	38
Married couple families with related children under age 18	—	—	—	—	—	—	10	11	11	12	11	10	10
White	—	—	—	—	—	—	9	10	10	11	10	9	9
Black	—	—	—	—	—	—	18	15	18	18	15	13	14
Hispanic	—	—	—	—	—	—	27	29	29	30	30	28	29
Asian	—	—	—	—	—	—	—	—	—	16	—	15	—
Related children under age 6	—	—	—	—	—	—	12	12	13	13	12	11	12
White	—	—	—	—	—	—	11	11	12	13	11	11	11
Black	—	—	—	—	—	—	20	17	22	20	15	14	14
Hispanic	—	—	—	—	—	—	28	33	32	33	33	31	32
Related children ages 6-17	—	—	—	—	—	—	10	10	10	11	10	9	9
White	—	—	—	—	—	—	8	9	9	10	9	9	8
Black	—	—	—	—	—	—	17	14	16	17	14	12	14
Hispanic	—	—	—	—	—	—	25	26	26	28	28	27	28
Female headed families with related children under age 18	68	61	53	53	51	54	53	56	55	54	53	50	49
White	60	53	43	44	42	45	46	47	46	46	46	43	43
Black	—	—	68	66	65	67	65	68	67	66	63	62	58
Hispanic	—	—	—	—	65	72	68	69	66	66	68	66	67
Related children under age 6	—	—	64	62	65	66	66	66	66	64	64	62	59
White	—	—	59	59	60	59	60	60	61	58	59	55	54
Black	—	—	71	67	72	75	73	74	73	72	70	71	64
Hispanic	—	—	—	—	70	78	77	74	72	72	74	72	72
Related children ages 6-17	—	—	49	49	46	48	47	50	49	49	47	45	45
White	—	—	38	40	36	40	39	41	39	40	40	37	38
Black	—	—	66	66	62	63	60	65	64	62	59	57	55
Hispanic	—	—	—	—	62	70	64	65	62	63	65	62	65

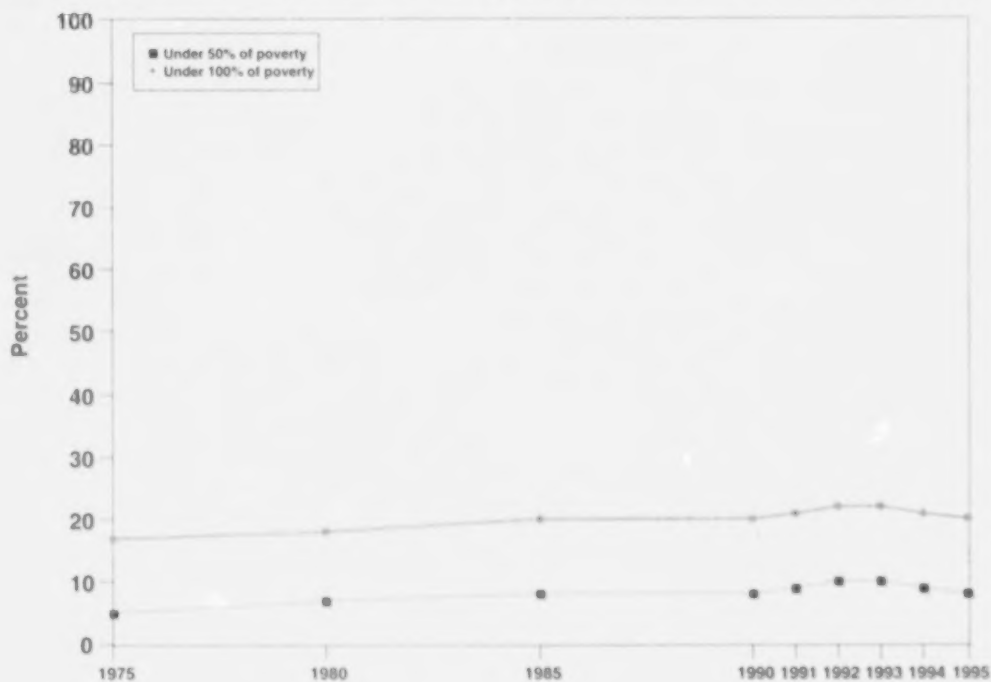
^aThe poverty level is based on money income and does not include noncash benefits, such as Food Stamps. Poverty thresholds reflect family size and composition and are adjusted each year using the annual average Consumer Price Index (CPI) level. The average poverty threshold for a family of four was \$16,036 in 1996. ^bRelated children include biological children, stepchildren, and adopted children of the householder and all other children in the household related to the householder (or reference person) by blood, marriage, or adoption.

Persons of Hispanic origin may be of any race. Estimates for whites, blacks, and Asians include persons of Hispanic origin.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 81, Table 4; No. 86, Table 1; No. 106, Table 11; No. 133, Table 11; No. 158, Table 7; No. 175, Table 6; No. 181, Table 5; No. 188, Table 8; No. 194, Table 2; No. 198, Table 2; data for 1994 and revised data for 1992 provided by the U.S. Bureau of the Census, Poverty and Health Branch.

Figure ES 1.3.A

Percentage of children in the United States under age 18 in families living below 50 percent and 100 percent of poverty:^a Selected years, 1975-1996

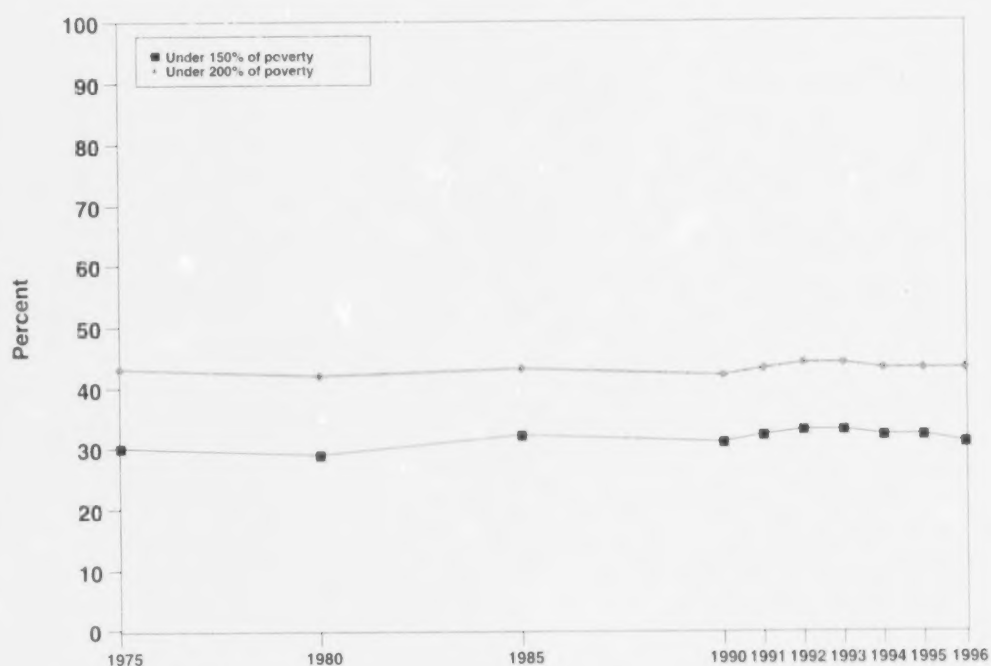


^aThe poverty level is based on money income and does not include noncash benefits, such as Food Stamps. Poverty thresholds reflect family size and composition and are adjusted each year using the annual average Consumer Price Index (CPI) level. The average poverty threshold for a family of four was \$16,036 in 1996. The levels shown here are derived from the ratio of the family's income to the family's poverty threshold. Related children include biological children, stepchildren, and adopted children of the householder and all other children in the household related to the householder (or reference person) by blood, marriage, or adoption.

Sources: Rates for 1975, 1980, and 1985 were calculated by Child Trends, Inc., based on data from the U.S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 106, Table 7; No. 133, Table 7; No. 158, Table 4; Rates for 1990 through 1996 are from the U.S. Bureau of the Census, *Current Population Reports*, Series P-60, Nos. 175, 185, 188, 189, 194, and 198, and revised data for 1992 provided by the U.S. Bureau of the Census, Poverty and Health Branch.

Figure ES 1.3.B

Percentage of children in the United States under age 18 in households in families living below 150 percent and 200 percent of poverty:^a selected years, 1975-1996

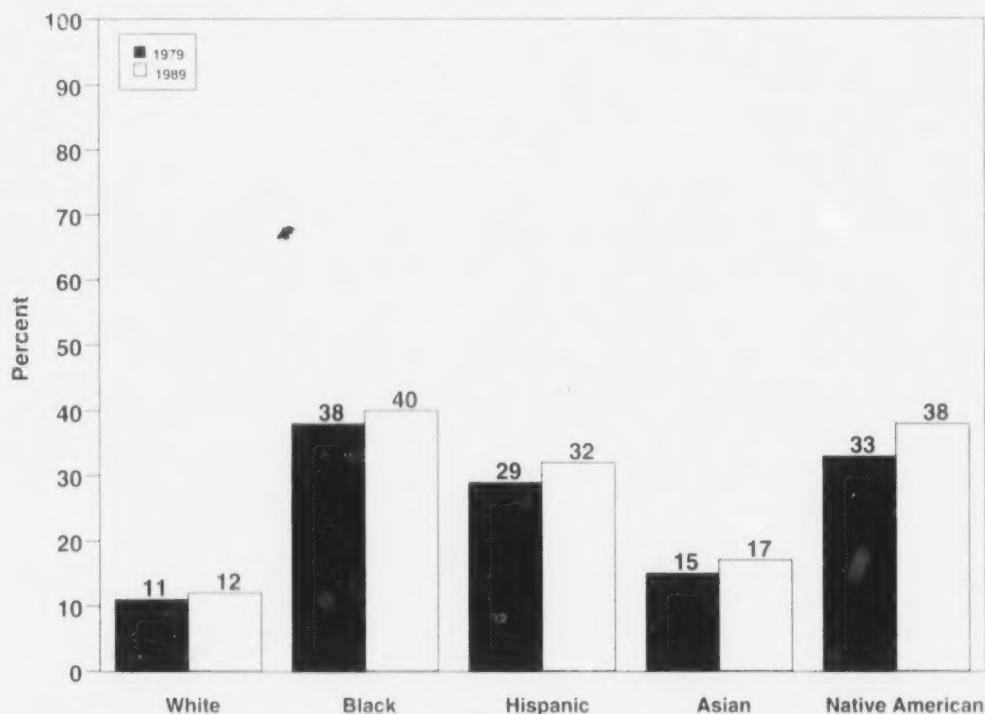


^aThe poverty level is based on money income and does not include noncash benefits, such as Food Stamps. Poverty thresholds reflect family size and composition and are adjusted each year using the annual average Consumer Price Index (CPI) level. The average poverty threshold for a family of four was \$16,036 in 1996. The levels shown here are derived from the ratio of the family's income to the family's poverty threshold. Related children include biological children, stepchildren, and adopted children of the householder and all other children in the household related to the householder (or reference person) by blood, marriage, or adoption.

Sources: Rates for 1975, 1980, and 1985 were calculated by Child Trends, Inc., based on data from the U.S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 106, Table 7; No. 133, Table 7; No. 158, Table 4; Rates for 1990 through 1996 are from the U.S. Bureau of the Census, *Current Population Reports*, Series P-60, Nos. 175, 185, 188, 189, 194, and 198, and revised data for 1992 provided by the U.S. Bureau of the Census, Poverty and Health Branch.

Figure ES 1.3.C

Percentage of children in the United States under age 18 living below the poverty level^a by race/ethnicity:^b 1979 and 1989



^aThe poverty level is based on money income and does not include noncash benefits, such as Food Stamps. Poverty thresholds reflect family size and composition and are adjusted each year using the annual average Consumer Price Index (CPI) level. The average poverty threshold for a family of four was \$16,036 in 1996. Related children include biological children, stepchildren, and adopted children of the householder and all other children in the household related to the householder (or reference person) by blood, marriage, or adoption.

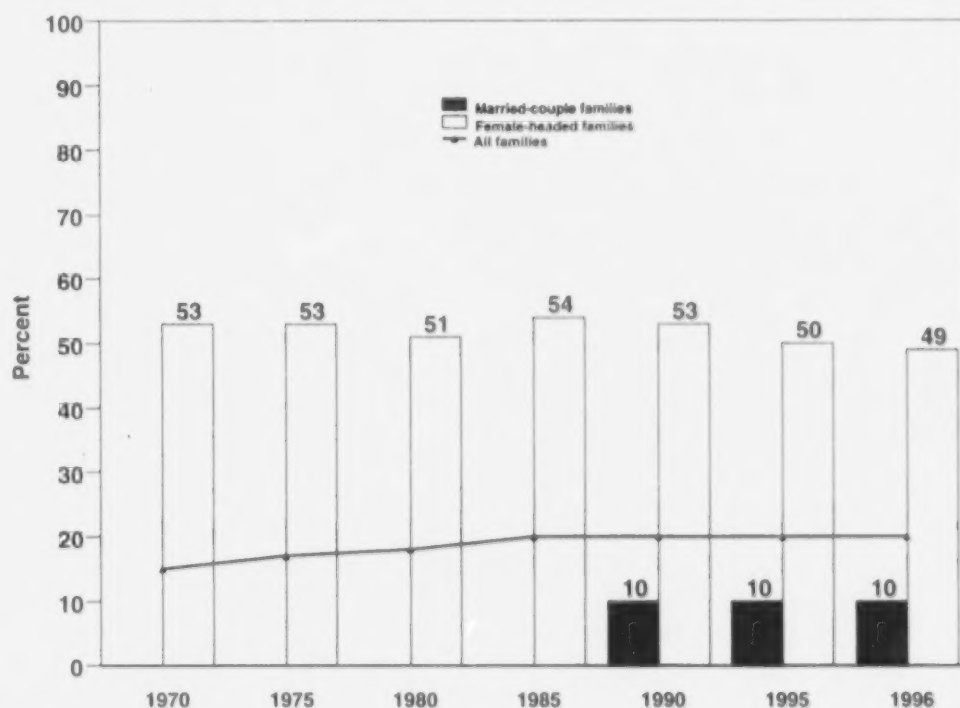
^bPersons of Hispanic origin may be of any race. Estimates for all races include persons of Hispanic origin.

Sources: U.S. Bureau of the Census, 1980 Census of the Population, "Detailed Population Characteristics," PC-80-1-D1-A, United States Summary, Table 304; U.S. Bureau of the Census, 1990 Census of the Population, "Social and Economic Characteristics," CP-2-1, United States Summary, Table 49.

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Figure ES 1.3.D

Percentage of children in the United States under age 18 living below the poverty level,^a by family type: selected years, 1970-1996



^a The poverty level is based on money income and does not include noncash benefits, such as Food Stamps. Poverty thresholds reflect family size and composition and are adjusted each year using the annual average Consumer Price Index (CPI) level. The average poverty threshold for a family of four was \$16,036 in 1996. Related children include biological children, stepchildren, and adopted children of the householder and all other children in the household related to the householder (or reference person) by blood, marriage, or adoption.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 81, Table 4; No. 86, Table 1; No. 106, Table 11; No. 133, Table 11; No. 158, Table 7; No. 175, Table 6; No. 181, Table 5; No. 188, Table 8; No. 194, Table 2; No. 198, Table 2; data for 1994 and revised data for 1992 provided by the U.S. Bureau of the Census, Poverty and Health Branch.

ES 1.4

LONG-TERM CHILDHOOD POVERTY

The statistics and discussion presented in ES 1.3 provide a "snapshot" of children in poverty in a single year; however, the effects of poverty on children are cumulative. Experiencing poverty year after year is more harmful to children than experiencing poverty occasionally.¹³ The majority of children never experience poverty while growing up, and, among those who do, most are in poverty for only a small portion of their childhood. Many children, however, and particularly many black children, spend a large proportion of their formative years living in poverty, with correspondingly negative consequences for their development and well-being.

In this section we focus on two cohorts of children.¹⁴ The first cohort was age 0-5 in 1972; the second was age 0-5 in 1982. In each case we look at the next ten years of the children's lives¹⁵ and calculate how many years of those ten years were spent in poverty.

Changes in Childhood Poverty Over Time. Although 76 percent of all children who were under age 6 in 1972 were never poor over the next 10 years, 11 percent were poor for three or more of those years, 6 percent were poor for six or more years, and 3 percent were poor for at least nine years (see Table ES 1.4 and Figure ES 1.4). The pattern is similar a decade later. Of children who were under age 6 in 1982, 73 percent were never poor over the next ten years, 15 percent were poor for three or more of those years, 7 percent were poor for six or more years, and 4 percent were poor for at least nine years.

Differences by Race. The risk of experiencing long-term poverty in childhood varies substantially by race (see Table ES 1.4). Of the nonblack children who were under age 6 in 1982, 79 percent never experienced poverty over the next ten years, 9 percent were poor for three or more of those years, 3 percent were poor for six or more years, and only 1 percent were poor for at least nine years. By contrast, 43 percent of all black children who were under age 6 in 1982 experienced poverty for at least three of those years, 28 percent were poor for six or more years, and 17 percent were poor for at least nine years.

Moreover, for black children the risk of experiencing long-term poverty in childhood changed between the 1970s and the 1980s. Of the black children who were under age 6 in 1972, 34 percent never experienced poverty over the next ten years. For black children who were under age 6 in 1982, 41 percent never experienced poverty over the next ten years. Thus, there was a significant increase between the 1970s and the 1980s in the percentage of black children avoiding poverty for ten consecutive years.

However, the risk for black children of experiencing poverty at least nine out of the years also increased between the 1970s and the 1980s. Of the black children who were under age 6 in 1972, 13 percent experienced poverty in at least nine of the next ten years. For black children who were under age 6 in 1982, 17 percent experienced poverty in at least 9 of the next 10 years.

¹³Duncan, G.J. and Brooks-Gunn, J. (eds.) *The Consequences of Growing Up Poor*. New York: Russell Sage, 1997.

¹⁴Focusing on two cohorts ten years apart allows us to determine if long-term exposure to poverty has changed.

¹⁵This is different from the "Lifetime Childhood Poverty" concept which was analyzed in the previous edition of this report. In the previous edition we measured the number of years in poverty out of all 18 years of childhood.

Table ES 1.4

Percentage of children in the United States living in poverty over 10-year period,^a by number of years in poverty,^b and by race: 1972-1981 and 1982-1991

Decade	Number of Years in Poverty				
	Never	One or more years	Three or more years	Six or more years	Nine or more years
1972-1981					
All children under age 6 in 1972	76	24	11	6	3
Black	34	66	44	24	13
Nonblack	82	18	6	3	1
1982-1991					
All children under age 6 in 1982	73	27	15	7	4
Black	41	59	43	28	17
Nonblack	79	21	9	3	1

^aThe poverty level is based on money income and does not include noncash benefits, such as Food Stamps. Poverty thresholds reflect family size and composition and are adjusted each year using the annual average Consumer Price Index (CPI) level. The average poverty threshold for a family of four was \$16,036 in 1996. Related children include biological children, stepchildren, and adopted children of the householder and all other children in the household related to the householder (or reference person) by blood, marriage, adoption or cohabitation.

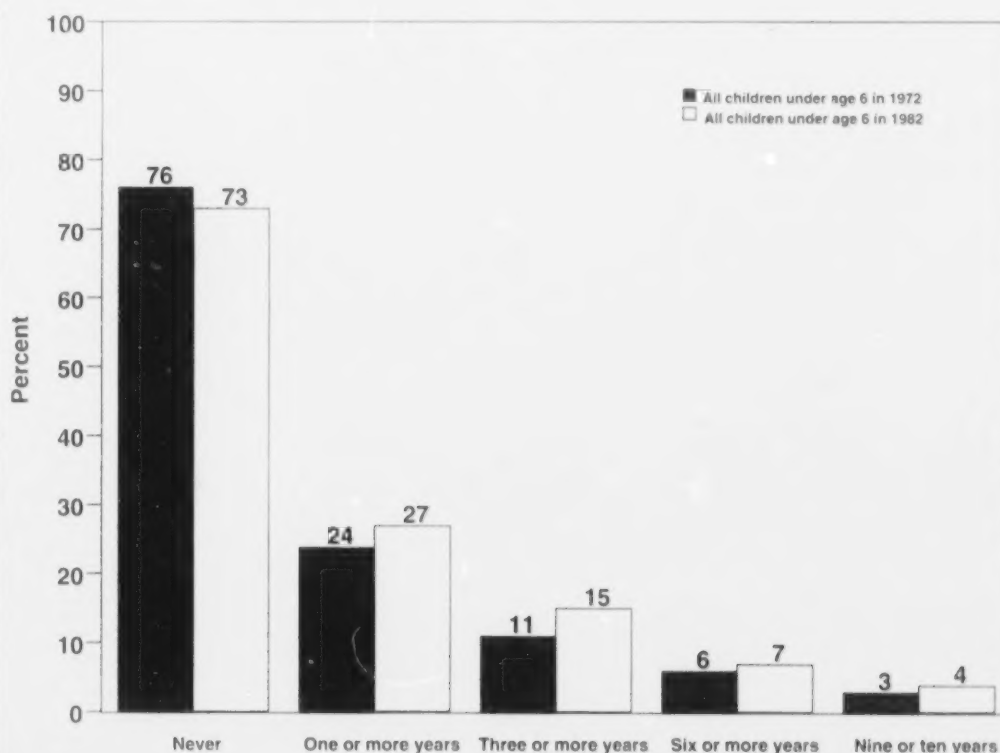
^bPoverty status for all children who were under age 6 in 1972 was monitored for the decade beginning in 1972 and ending in 1981. Similarly, poverty status for all children who were under age 6 in 1982 was monitored for the decade beginning in 1982 and ending in 1991. For these two cohorts of children, the table displays the percentage who were in poverty by number of years in poverty over each ten-year period (minimum is zero; maximum is 10 years).

Source: Estimates supplied by Greg J. Duncan, Northwestern University, based on data from the Panel Study of Income Dynamics (PSID).

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Figure ES 1.4

Percentage of children in the United States living in poverty,^a by number of years in poverty:^b 1972-1981 and 1982-1991



^aThe poverty level is based on money income and does not include noncash benefits, such as Food Stamps. Poverty thresholds reflect family size and composition and are adjusted each year using the annual average Consumer Price Index (CPI) level. The average poverty threshold for a family of four was \$16,036 in 1996. Related children include biological children, stepchildren, and adopted children of the householder and all other children in the household related to the householder (or reference person) by blood, marriage, or adoption.

^bPoverty status for all children who were under age 6 in 1972 was monitored for the decade beginning in 1972 and ending in 1981. Similarly, poverty status for all children who were under age 6 in 1982 was monitored for the decade beginning in 1982 and ending in 1991. For these two cohorts of children, the Table displays the percentage who were in poverty by number of years in poverty over each 10-year period (minimum is zero; maximum is 10 years).

Source: Estimates supplied by Greg J. Duncan, Northwestern University, based on data from the Panel Study of Income Dynamics (PSID).

ES 2.1

**EFFECT OF GOVERNMENT CASH AND NEAR-CASH
TRANSFER PROGRAMS ON POVERTY AMONG PERSONS
LIVING IN FAMILIES WITH CHILDREN UNDER AGE 18**

Although the federal system of cash and near-cash transfers (including federal income and payroll taxes)¹⁶ plays a substantial role in reducing the poverty rate of children, its collective effect has varied substantially over time. In 1979, federal cash and near-cash transfers produced a 37 percent reduction in poverty among persons in families with related children under age 18 (see Figure ES 2.1); however, by 1983, the same transfer programs produced only a 19 percent reduction in poverty. By 1989 the percentage poverty reduction recovered to 24 percent, rose again to 29 percent in 1993, and to 34 percent in 1996.

In the absence of any federal transfers and taxes, 20 percent of all persons living in families with children would have been poor in 1996 (see Table ES 2.1). Social insurance programs other than Social Security reduced the poverty rate to 19 percent. The Social Security system reduced the poverty rate further to 18 percent. After inclusion of means-tested cash transfers, the poverty rate fell to 17 percent. Food and housing benefits cut the poverty rate to 14 percent. Finally, the federal tax system reduced the poverty rate of all persons living in families with children to 13 percent.

All of the federal cash and near cash transfers considered in Table ES 2.1, except federal taxes, reduced poverty among persons in families with related children under age 18 in all years. Until recently, the net impact of the federal tax system was to increase the poverty rate. By 1989, however, the impact of the tax system on the number of such persons in poverty became neutral,¹⁷ and since 1994, the federal tax system has reduced the number of persons in poverty. This is because of the recent expansion of the Earned Income Tax Credit (EITC), which provides refundable tax credits to low-income families with children and at least one working parent whose earnings are low. Because the credit is refundable, many families eligible for the EITC receive a payment from the Treasury instead of paying federal income tax.

¹⁶Federal cash and near-cash transfers, which transfer income from the government to individuals and families, include Social Security, unemployment compensation, workers' compensation, all means-tested cash transfers, and food and housing benefits. Federal payroll taxes (for Social Security and Medicare) can be thought of as a *negative* transfer (since they always transfer income from individuals to the federal government). Federal income taxes can be either a positive or a negative transfer. Families with children and relatively low taxable income, most of which comes from earnings, can receive a substantial income transfer from the federal government due to the Earned Income Tax Credit.

¹⁷By "neutral" we mean that the tax system neither increased nor decreased the number of persons in poverty.

Table ES 2.1

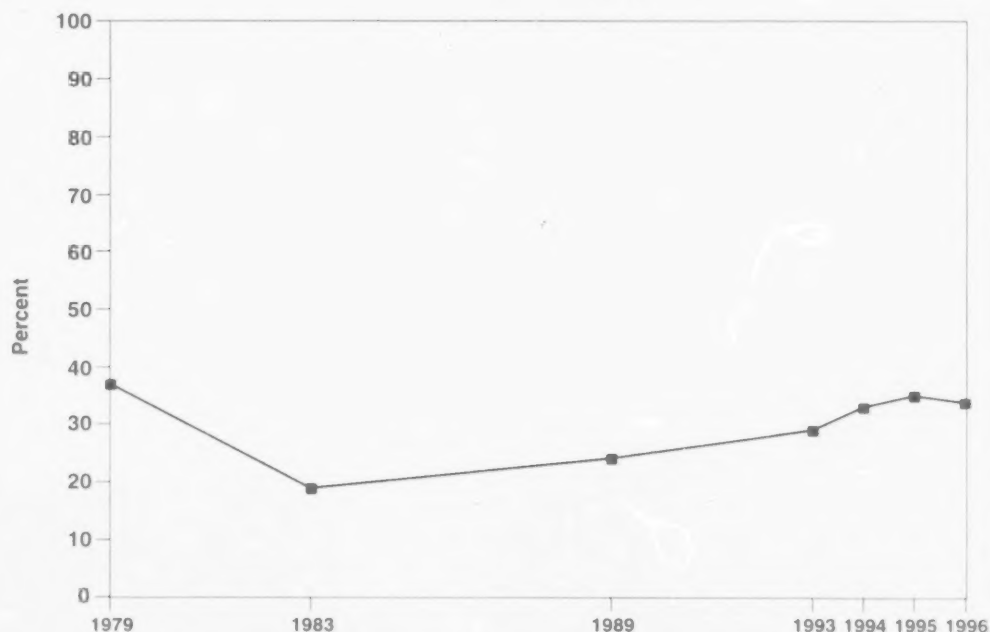
Antipoverty effectiveness of cash and near-cash transfers (including federal income and payroll taxes) for all individuals in the United States in families with related children under age 18: selected years, 1979 - 1996

	1979	1983	1989	1993	1994	1995	1996
Total population (in thousands)	133,435	132,123	135,430	144,551	145,814	146,227	146,797
Poverty rate (percent):							
Cash income before transfers	17	22	19	22	21	20	20
Plus social insurance (other than Social Security)	16	20	18	21	21	19	19
Plus Social Security	14	19	17	20	19	18	18
Plus means-tested cash transfers	13	18	16	19	18	17	17
Plus food and housing benefits	10	17	14	16	15	14	14
Less federal taxes	11	18	14	16	14	13	13
Total percentage reduction in poverty rate	37	19	24	29	33	35	34

Sources: Congressional Budget Office (CBO) computations using the CBO tax model, with data from the March Current Population Survey, 1980, 1984, 1990, 1994-1997. Table prepared by staff from the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services.

Figure ES 2.1

Antipoverty effectiveness of cash and near-cash transfers (including federal income and payroll taxes) for all individuals in the United States in families with related children under age 18: selected years, 1979-1996



Sources: Congressional Budget Office (CBO) computations using the CBO tax model, with data from the March Current Population Survey, 1980, 1984, 1990, 1994-1997. Table prepared by staff from the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services.

ES 2.2

MEANS-TESTED ASSISTANCE: AFDC¹⁸ AND FOOD STAMPS

Many poor children have depended on Aid to Families with Dependent Children (AFDC) and the Food Stamp program for basic material needs. AFDC was a federal and state cash assistance program targeted at needy children, and at certain others in the household of such a child.¹⁹ As a result of major welfare reform enacted in August 1996, the AFDC program has now been replaced by the Temporary Assistance to Needy Families program (TANF). TANF provides a block grant to states to design and administer their own welfare and work programs.

The Food Stamp program provides low-income households with vouchers that can be exchanged for food. The welfare reform law includes significant new restrictions on Food Stamp eligibility for immigrants who have not become U.S. citizens.

Children's Receipt of AFDC and Other Welfare Benefits. Twelve percent of all children lived in families receiving AFDC or general assistance in 1979, according to survey data (see Figure ES 2.2.A). The rate decreased slightly to 11 percent in 1989, but by 1993 had increased to 14 percent; however, by 1996, the reciprocity rate dropped back to 11 percent.

Somewhat more than 7 million children lived in families receiving welfare in 1979 and 1989 (see Table ES 2.2.A). By 1994, 9.5 million children were living in families receiving welfare. By 1996, the number of children on welfare dropped sharply to 7.5 million. Administrative data show a similar trend (see Table ES 2.2.C).

Children's Receipt of Food Stamps. Food Stamp receipt shows a similar pattern. In both 1979 and 1989, 15 percent of all children lived in households receiving Food Stamps, according to survey data (see Figure ES 2.2.A). The proportion increased to 20 percent by 1993. In that year 14.2 million children lived in households receiving Food Stamps, up from 9.7 million in 1989 (see Table ES 2.2.B). However, the reciprocity rate dropped to 17 percent by 1996.

Administrative data for Food Stamps also show a rise in the number of children receiving Food Stamps during the late 1980s and early 1990s, followed by a recent decline (see Table ES 2.2.C). According to these data, the number of children receiving Food Stamps grew from 9.9 million in 1985 to 14.2 million in 1993. By 1996, the number declined to 13.2 million, or 19 percent of the child population.

Receipt of AFDC and Food Stamps by Race and Hispanic origin. The percentage of children receiving AFDC²⁰ and Food Stamps varies substantially by race/Hispanic origin. According to 1992 data from a different source (the Panel Study of Income Dynamics²¹), only 5 percent of white non-Hispanic children received AFDC and only 8 percent received Food Stamps (see Figure ES 2.2.B). In contrast, among black non-Hispanic children, 32 percent received AFDC and 42 percent received Food Stamps. Among Hispanic children, 18 percent received AFDC and 30 percent received Food Stamps.

There was also substantial variation among Hispanic children depending upon their descent. Among children of Cuban descent, only 8 percent received AFDC and 18 percent received Food Stamps. In contrast, among children of Puerto Rican descent, 28 percent received AFDC and 48 percent received Food Stamps. Among children of Mexican descent, 15 percent received AFDC and 30 percent received Food Stamps.

¹⁸Includes General Assistance.

¹⁹Needy children include those "who have been deprived of parental support or care because their father or mother is absent from the home continuously, is incapacitated, is deceased or is unemployed." See *Overview of Entitlement Programs: 1994 Green Book*. U.S. House of Representatives, Committee on Ways and Means.

²⁰Includes General Assistance.

²¹The Panel Study of Income Dynamics excludes children who migrated to the United States after 1990. Consequently, it understates recent migrants' share of the Hispanic population. This is likely to lead to a lower estimate of receipt of transfers for Hispanics than a more representative survey such as the Current Population Survey.

Table ES 2.2.A

Percentage and number (in thousands) of children in the United States under age 18 in families receiving AFDC or General Assistance: selected years, 1979-1996

	1979	1989	1993	1994	1995	1996
Number (in thousands)	7,228	7,116	9,440	9,463	8,656	7,490
Percent	12	11	14	13	12	11

Sources: Estimates for 1979-1994 calculated by Child Trends, Inc., based on analysis of the March 1980, 1990, 1994, and 1995 Current Population Surveys. Estimates for 1995 and 1996 provided by U.S. Bureau of the Census.

Table ES 2.2.B

Percentage and number (in thousands) of children in the United States under age 18 in households receiving Food Stamps: selected years, 1979-1996

	1979	1989	1993	1994	1995	1996
Number (in thousands)	9,336	9,696	14,193	13,677	13,115	12,272
Percent	15	15	20	19	18	17

Sources: Estimates for 1979-1994 calculated by Child Trends, Inc., based on analysis of the March 1980, 1990, 1994, and 1995 Current Population Surveys. Estimates for 1995 and 1996 provided by U.S. Bureau of the Census.

Table ES 2.2.C

Percentage and number (in thousands) of children in the United States^a under age 18 receiving AFDC or Food Stamps according to administrative records: selected years, 1985-1996^b

	1985	1990	1991	1992	1993	1994	1995	1996
AFDC								
Number (in thousands)	7,041	7,620	8,375	9,087	9,402	9,464	9,152	8,559
Percent	11	12	13	14	14	14	13	12
Food Stamps								
Number (in thousands)	9,906	10,127	11,952	13,349	14,196	14,391	13,883	13,200
Percent	16	16	18	20	21	21	20	19

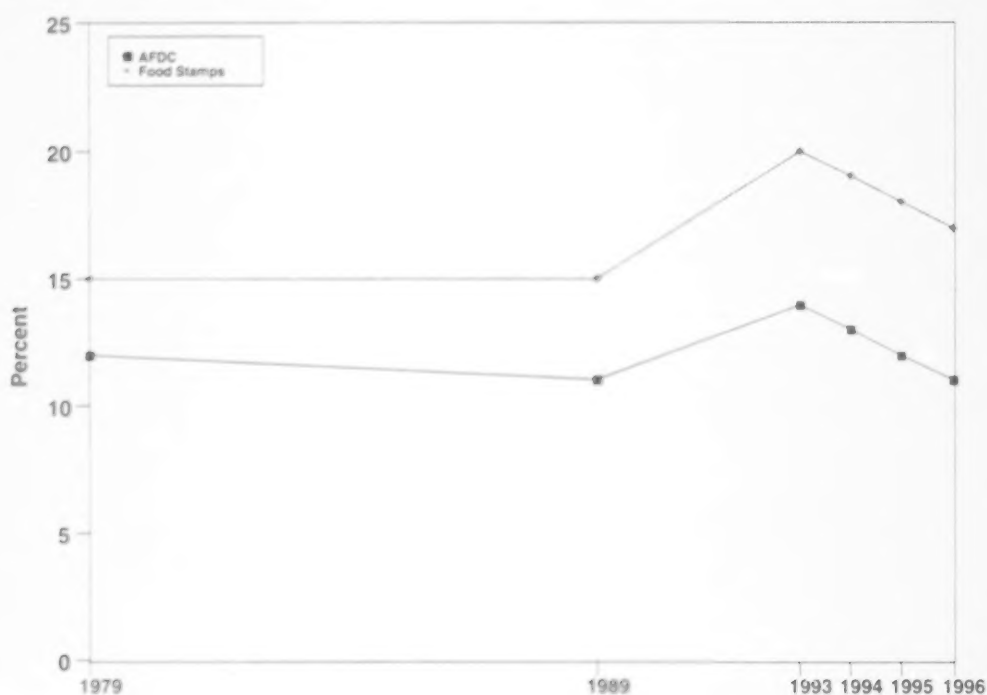
^aNot including territories.

^bData for 1996 are preliminary.

Sources: AFDC statistics calculated by the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, based on unpublished data from the Administration for Children and Families, U.S. Department of Health and Human Services; Food Stamps statistics calculated by the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, based on unpublished data from the Food and Consumer Service, U.S. Department of Agriculture.

Figure ES 2.2 A

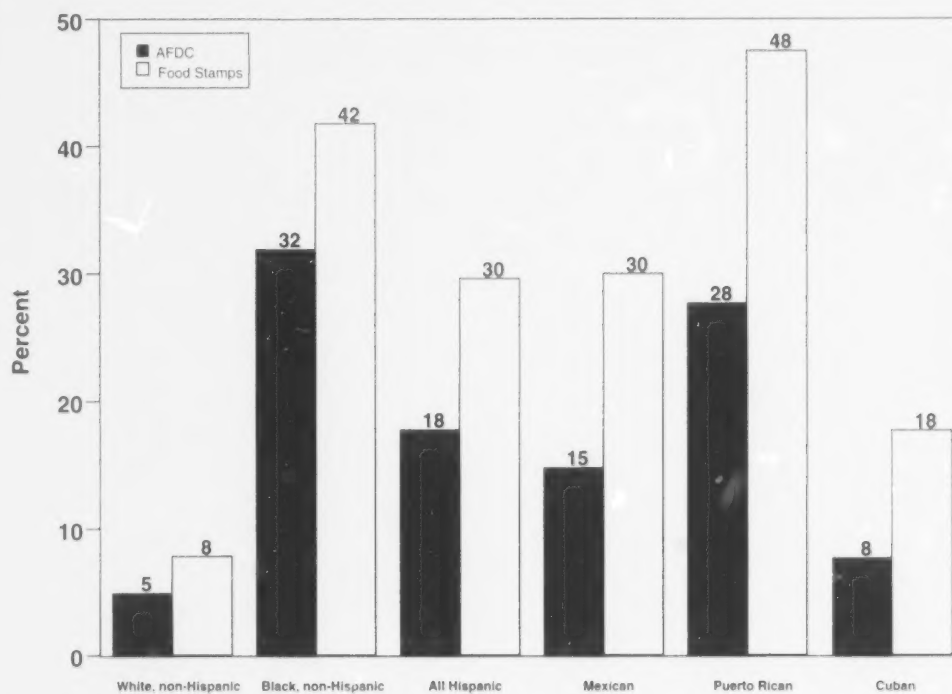
Percentage of children in the United States under age 18 living in families receiving AFDC or General Assistance, and in households receiving Food Stamps: selected years, 1975-1996



Sources: Estimates for 1979-1994 calculated by Child Trends, Inc., based on analysis of the March 1980, 1990, 1994, and 1995 Current Population Surveys. Estimates for 1995 and 1996 provided by U.S. Bureau of the Census.

Figure ES 2.2.B

Percentage of children in the United States under age 18 in households receiving AFDC and Food Stamps by race/ethnicity^a and by descent, 1992



^aEstimates for Hispanic children exclude those migrating to the United States after 1990.

Source: Estimates supplied by Sandra Hofferth, University of Michigan, based on data from the Panel Study of Income Dynamics.

ES 2.3

LONG-TERM WELFARE DEPENDENCE²²

Long-term welfare receipt imposes large costs on taxpayers; moreover, there is some evidence suggesting that long-term welfare receipt may have a more negative impact on adult recipients and their children than short-term receipt that helps a family weather a crisis.²³

Living in a family receiving AFDC at some point during childhood is not an uncommon experience. Among all children under age 6 in 1982, 21 percent were on AFDC for at least one year over the next ten years (see Figure ES 2.3.A). Long-term welfare receipt is considerably less common: only 8 percent of all children under age 6 in 1982 were on AFDC at least six of the ten years between 1982 and 1991, and only 4 percent were on AFDC at least nine years.

Differences by Race. For black children, however, long-term welfare receipt is considerably more common than for nonblack children (see Figure ES 2.3.A). Among all black children under age 6 in 1982, 26 percent were on AFDC at least six of the next ten years (compared with 5 percent of nonblack children). Similarly, 17 percent were on AFDC for at least nine years (compared with 2 percent of nonblack children). Moreover, a majority of these black children under age 6 were on AFDC at least once between 1982 and 1991.

Changes Over Time. Table ES 2.3.A compares the ten-year welfare experience of children under age 6 in 1972 with the experience of children under age 6 in 1982. For nonblack children, there is virtually no difference; however, the proportion of black children whose families *never* received welfare increased from 34 percent to 42 percent.

Welfare Benefits As a Percentage of Total Family Income. A smaller but still substantial portion of children lived in families who were highly dependent on welfare ("highly dependent" defined as families who received at least half of total income from AFDC and Food Stamps) for some period of time. Among children under age 6, in 1982, 14 percent were in families highly dependent on welfare for at least one year over the next decade (see Figure 2.3.B); five percent were highly dependent for six or more years. Nearly 20 percent of black children were highly dependent on welfare for six or more years, compared to 2 percent of non-black children.

²²In this section, "welfare" has been defined to include Aid to Families with Dependent Children (AFDC) only or AFDC plus Food Stamps. Supplemental Security Income (SSI) and General Assistance, which are often considered to be "welfare," are not analyzed in this section.

²³Duncan, G., and Brooks-Gunn, J. 1997. "Income Effects Across the Life Span: Integration and Interpretation." In *Consequences of Growing Up Poor* (G. Duncan and J. Brooks-Gunn, eds.). New York: Russell Sage Press.

Table ES 2.3.A

Percentage of children in families^a in the United States receiving any AFDC benefit by number of years^b and by race:^c 1972-1981 and 1982-1991

Decade	Percentage receiving any AFDC benefit				
	Never	One or more years	Three or more years	Six or more years	Nine or more years
1972-1981					
All children under age 6 in 1972	78	22	14	8	4
Black	34	66	51	30	15
Nonblack	85	15	8	4	3
1982-1991					
All children under age 6 in 1982	79	21	14	8	4
Black	42	58	42	26	17
Nonblack	86	14	9	5	2

^aIn the Panel Study of Income Dynamics, the survey used for this table, families include cohabitators and other individuals who are sharing resources with family members and excludes only people such as roomers or employees who have a pure business-type connection to the family.

^bReceipt of AFDC by families of children who were under age 6 in 1972 was monitored for the decade beginning in 1972 and ending in 1981. Similarly, receipt of AFDC by families of children who were under age 6 in 1982 was monitored for the decade beginning in 1982 and ending in 1991. For these two cohorts of children, table displays percentage who participated in AFDC by number of years participating over each 10-year period (minimum is never; maximum is 10 years).

^cPersons of Hispanic origin may be of any race. Estimates for blacks and nonblacks include persons of Hispanic origin.

Source: Estimates supplied by Greg J. Duncan, Northwestern University, based on data from the Panel Study of Income Dynamics.

Table ES 2.3.B

Percentage of children in the United States for whom AFDC and Food Stamp benefits exceeded 50 percent of family income (including Food Stamps), by number of years^a, and by race:^b 1972-1981 and 1982-1991

Decade	Number of years in which AFDC and Food Stamp benefits were at least half of family income (including Food Stamp benefits)				
	Never	One or more years	Three or more years	Six or more years	Nine or more years
1972-1981					
All children under age 6 in 1972	87	13	8	3	2
Black	50	50	32	14	8
Nonblack	93	7	4	1	1
1982-1991					
All children under age 6 in 1982	86	14	8	5	2
Black	59	41	29	19	8
Nonblack	91	9	4	2	1

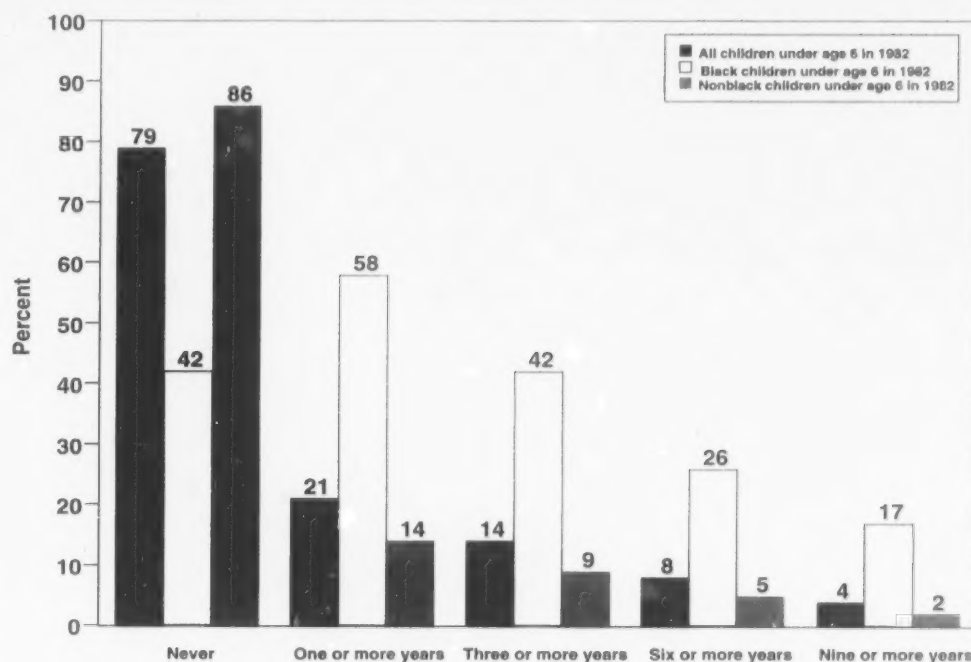
^aReceipt of AFDC and Food Stamps by families of children who were under age 6 in 1972 was monitored for the decade beginning in 1972 and ending in 1981. Similarly, receipt of AFDC and Food Stamps by families of children who were under age 6 in 1982 was monitored for the decade beginning in 1982 and ending in 1991. For these two cohorts of children, table displays percentage of children for whom these benefits exceeded 50 percent of family income by number of years in which this was true over each 10-year period (minimum is never; maximum is 10 years).

^bPersons of Hispanic origin may be of any race. Estimates for blacks and nonblacks include persons of Hispanic origin.

Source: Estimates supplied by Greg J. Duncan, Northwestern University, based on data from the Panel Study of Income Dynamics (PSID).

Figure ES 2.3.A

Percentage of children in the United States receiving any AFDC^a benefit, by number of years, and by race:^b 1982-1991



^aReceipt of AFDC by families of children who were under age 6 in 1982 was monitored for the decade beginning in 1982 and ending in 1991. The figure displays the percentage who participated in AFDC by number of years participating over the 10-year period (minimum is zero; maximum is 10 years).

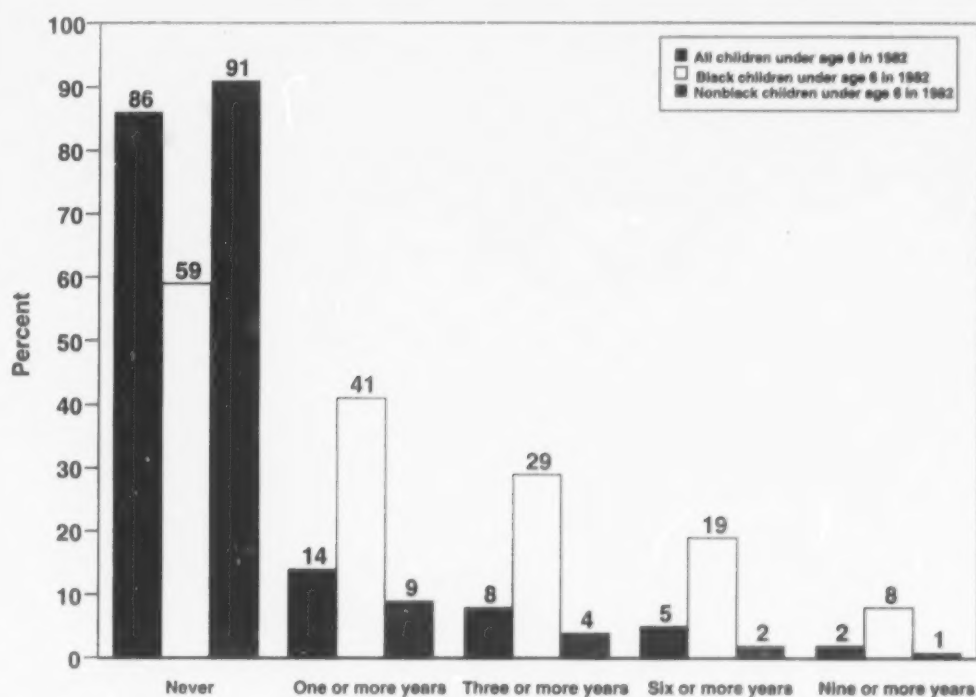
^bPersons of Hispanic origin may be of any race. Estimates for blacks and nonblacks include persons of Hispanic origin.

Source: Estimates supplied by Greg J. Duncan, Northwestern University, based on data from the Panel Study of Income Dynamics (PSID).

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Figure ES 2.3.B

Percentage of children in the United States for whom AFDC and Food Stamp benefits exceeded 50 percent of family income (including Food Stamps) by number of years,^a and by race:^b 1982-1991



^aReceipt of AFDC and Food Stamps by families of children who were under age 6 in 1982 was monitored for the decade beginning in 1982 and ending in 1991. The figure displays the percentage of children for whom these benefits exceeded 50 percent of family income by number of years in which this was true over the 10-year period (minimum is zero; maximum is 10 years).

^bPersons of Hispanic origin may be of any race. Estimates for blacks and nonblacks include persons of Hispanic origin.

Source: Estimates supplied by Greg J. Duncan, Northwestern University, based on data from the Panel Study of Income Dynamics (PSID).

ES 2.4

SOURCES OF INCOME AND PAYMENT OF FEDERAL TAXES FOR FAMILIES WITH CHILDREN

Although most families with children receive most of their income from their own earnings and other private sources, federal transfer programs providing both cash and in-kind benefits are an important supplement for many families and the most important source of income for some; thus, many children's standard of living is significantly affected by these programs. Most families with children pay taxes to the federal government to help pay for these programs.

Federal Cash Benefits. Many families receive some of their income in the form of government transfers, although the overwhelming majority of families (95 percent in 1993) had other private sources of income as well (see Figure ES 2.4.A).

The most common federal cash benefit in 1993 was the Earned Income Tax Credit (EITC),²⁴ which the federal government paid to 29 percent of families with children.

The federal government paid cash social insurance benefits (including Social Security, Workers' Compensation, and Unemployment Insurance benefits) to 20 percent of families with children.

Cash benefits from the AFDC program were paid to 16 percent of families with children.

Supplemental Security Income (SSI) benefits were provided to only 4 percent of families with children.

A small percentage (2 percent) of families with children received cash benefits from other means-tested cash programs.

Single-parent families with children are less likely than married-couple families with children to have pre-transfer income (see Table ES 2.4.A). While 98 percent of married-couple families with children had pre-transfer income, only 85 percent of single-parent families had income before transfers. It is not surprising, therefore, that single-parent families with children were more likely than married-couple families with children to receive means-tested cash benefits. For example, while only 6 percent of married-couple families received AFDC benefits, 40 percent of single-parent families received these benefits.

Federal In-Kind Benefits. Many families also receive in-kind benefits from the federal government (see Figure ES 2.4.A).

The federal government provided Food Stamps to 20 percent of families with children.

Housing benefits were provided to 6 percent of families with children.

Single-parent families with children were much more likely than married-couple families to receive in-kind benefits (see Table ES 2.4.A). For example, while only 9 percent of married-couple families received food stamps, 45 percent of single-parent families did so. Similarly, only 1 percent of married-couple families received housing benefits, but 17 percent of single-parent families did so.

Federal Taxes. Most families with children pay both social security (FICA) taxes²⁵ and federal income taxes (see Figure ES 2.4.B). In 1993, 91 percent of all families with children paid social security taxes, while 76 percent paid federal income taxes. Married-couple families were more likely than single-parent families to pay federal taxes. While 97 percent of married-couple families paid social security taxes, only 76 percent of single-parent families did so. Similarly, while 88 percent of married-couple families paid federal income taxes, only 48 percent of single-parent families did so.

²⁴This benefit is paid to families with at least one child, one parent with earnings, and relatively low taxable income. If the credit is larger than a family's federal income tax liability, the difference is refunded to the family. The EITC figure presented in Figure ES 2.4.A and Table ES 2.4.A refers only to families that received a refund and not to families whose EITC only partially offset their federal income tax liability.

²⁵FICA taxes cover the Old Age, Survivors, and Disability Insurance (OASDI or Social Security) program plus Medicare.

Table ES 2.4.A

Percentage of families with children under age 18 in the United States receiving various sources of income, by family structure: 1993

	Single Parent	Married Couple	All
Pre-transfer income	85	98	95
Cash benefits			
Social insurance income	21	20	20
AFDC	40	6	16
SSI	6	2	4
Other means-tested cash benefits	3	1	2
In-kind benefits			
Food Stamps	45	9	20
Housing	17	1	6
Earned Income Tax Credit	51	19	29

Note: The Urban Institute's Transfer Income Model (TRIM) simulates eligibility for and payment of cash and in-kind benefits for a representative sample of the U.S. population based upon the characteristics of the persons, families, and households contained in the sample. TRIM also simulates the payment of federal income and payroll taxes for this same representative sample. The results of TRIM simulations may differ from the results produced by other data sets or models because, for most programs, TRIM uses data corrected for under- and nonreporting. In the case of the Earned Income Tax Credit (EITC), for example, TRIM estimates differ from those of the U.S. Treasury because TRIM assumes that nearly everyone who is eligible for the EITC actually receives it. In reality, some ineligible families receive it and some eligible families do not. The errors do not exactly offset one another.

Source: 1994 Current Population Survey, as processed by the Urban Institute's Transfer Income Model (TRIM).

Table ES 2.4.B

Percentage of families in the United States with children under age 18 and with federal tax liability, by type of tax and family structure: 1993

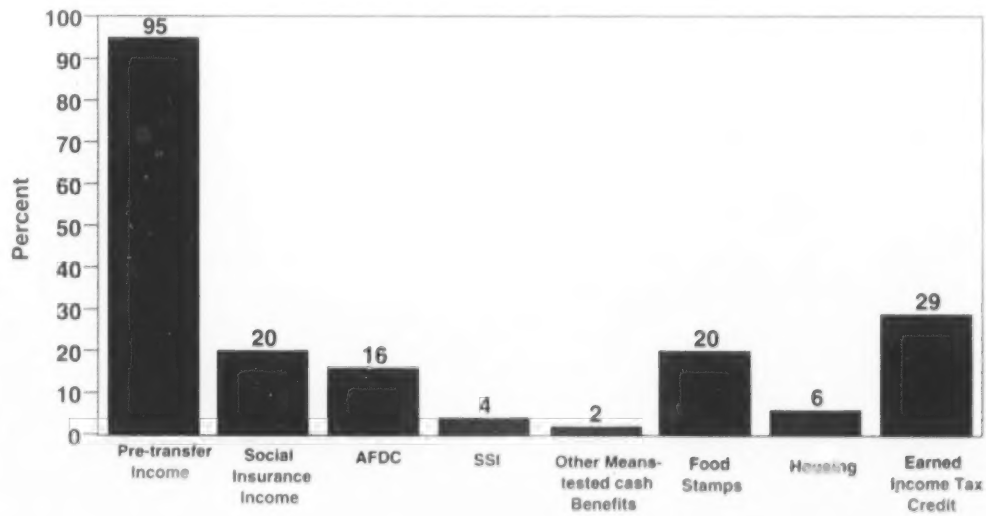
	Single Parent	Married Couple	All
Social Security (FICA)	76	97	91
Federal Income Tax	48	88	76

Note: The Urban Institute's Transfer Income Model (TRIM) simulates eligibility for and payment of cash and in-kind benefits for a representative sample of the U.S. population based upon the characteristics of the persons, families, and households contained in the sample. TRIM also simulates the payment of federal income and payroll taxes for this same representative sample. The results of TRIM simulations may differ from the results produced by other data sets or models because, for most programs, TRIM uses data corrected for under- and nonreporting. In the case of the Earned Income Tax Credit (EITC), for example, TRIM estimates differ from those of the U.S. Treasury because TRIM assumes that nearly everyone who is eligible for the EITC actually receives it. In reality, some ineligible families receive it and some eligible families do not. The errors do not exactly offset one another.

Source: 1994 Current Population Survey, as processed by the Urban Institute's Transfer Income Model (TRIM).

Figure ES 2.4.A

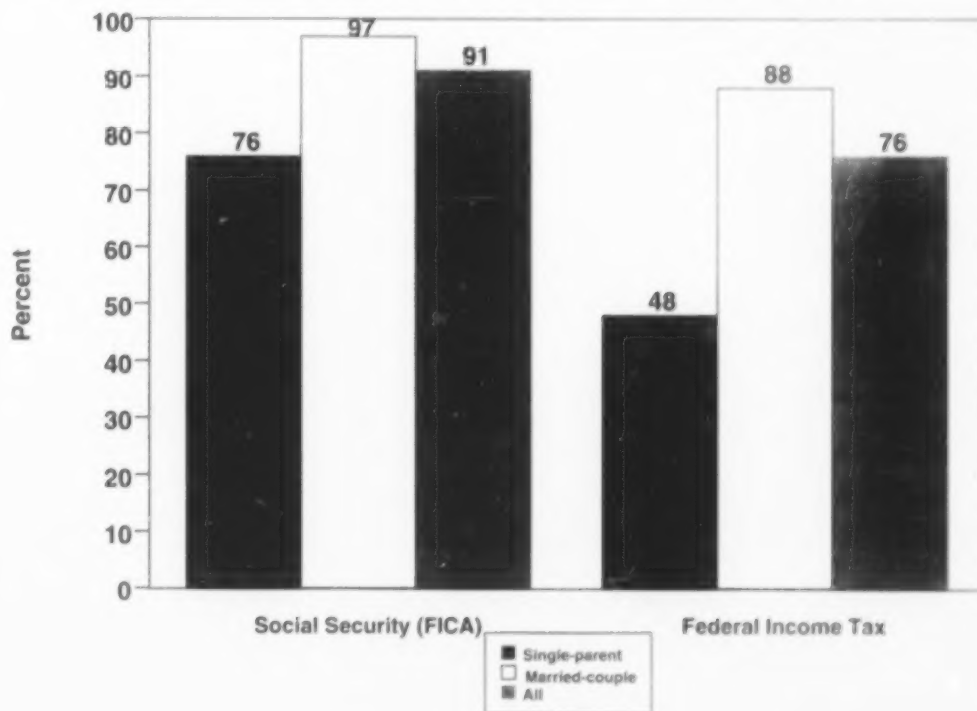
Percentage of families with children under age 18 in the United States receiving various sources of income: 1993



Source: 1994 Current Population Survey, as processed by the Urban Institute's Transfer Income Model (TRIM).

Figure ES 2.4.B

Percentage of families in the United States with children under age 18 and with federal tax liability, by type of tax and family structure: 1993



Source: 1994 Current Population Survey, as processed by the Urban Institute's Transfer Income Model (TRIM).

ES 2.5

CHILD SUPPORT NONPAYMENT

The issue of child support has gained in importance in recent years. As rates of divorce and nonmarital births have risen, an increasing proportion of children and their custodial parents depend on this source of income for financial support, and suffer correspondingly when it is not forthcoming. In addition, when noncustodial parents do not support their children financially, it is often left to the government to step in and provide support in the form of AFDC, Food Stamps, and other forms of assistance.

In many cases, and particularly where nonmarital births are concerned, families who should be receiving child support from the noncustodial parent lack a court order establishing how much is owed. Among those who do have court orders, about half (49 percent) do not receive all of the money they are owed in a given year.²⁶

Table ES 2.5 shows the proportion of families who had court orders for child support but received no support at all for selected years between 1978 and 1991. Estimates are presented for all eligible families, and for population subgroups defined by marital status, race and Hispanic origin. During that time period, the proportion of all eligible families who received no support ranged between 21 and 28 percent. Rates of nonpayment decreased somewhat from 1978 to 1985, from 28 to 21 percent, then rose to about 24 percent by the end of the decade.

Differences by Marital Status. Women who are separated or never married were substantially less likely to have court orders for child support than those who were divorced, or who had remarried.²⁷ Once a court order is established, however, the rates of nonpayment appear to be fairly similar across all marital status groups. In 1991, for example, rates of nonpayment ranged from about 22 percent for divorced women to 26 percent for separated and never married women.²⁸

Differences by Race and Hispanic Origin. In most years, eligible white families experienced lower rates of nonpayment than either black or Hispanic families. For example, in 1991, the most recent year for which estimates are available, the percentage of eligible families receiving no payment was 22 percent for whites, 30 percent for blacks, and 31 percent for Hispanics.

Methods of Payment. Some custodial parents receive their child support payments directly from the noncustodial parent or that parent's place of employment. Other parents use the Child Support Enforcement program, authorized under Title IV-D of the Social Security Act, to establish and enforce child support orders. Families receiving AFDC and Medicaid benefits are required to cooperate with their state's child support enforcement agency. Other families may request these services. Since fiscal year 1992, collections made by child support enforcement agencies have increased by nearly 50 percent, from \$8 billion in fiscal year 1992 to \$11.8 billion in fiscal year 1996.²⁹ For the same period, paternity establishments increased more than 40 percent and child support orders increased 16 percent.

²⁶U.S. Bureau of the Census, 1991, *Child Support for Custodial Mothers and Fathers*, Current Population Report, Series P-60, No. 187.

²⁷Ibid.

²⁸In some years, rates of nonpayment appear to be substantially smaller for women who were separated or never married than for those who were divorced or remarried, but estimates for the former groups are based on small samples, which are subject to greater error. Thus, disparities in sample size may account for the apparent cross-group differences in those years.

²⁹U.S. Department of Health and Human Services (HHS), Administration on Children and Families, 1997, "Child Support Enforcement: A Clinton Administration Priority" HHS Fact Sheet.

Table ES 2.5

Child support nonpayment: percentage of eligible women^a in the United States who are not receiving child support, by marital status and by race and Hispanic origin:^b selected years, 1978-1991

	1978	1981	1983	1985	1987	1989	1991 ^c
Total	28	23	24	21	24	25	24
Marital status							
Married	32	25	28	24	27	28	24
Divorced	27	23	24	21	22	23	22
Separated	27	16	13	12	26	20	26
Never married	19	27	24	20	17	27	26
Race and Hispanic origin^c							
White	27	23	23	21	23	24	22
Black	37	23	31	22	27	30	30
Hispanic	35	29	38	26	25	30	31

^aEligible women are those with court orders for child support.

^bPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

^cEstimates for 1991 were produced using somewhat different assumptions than in previous years, and should not be contrasted with earlier estimates.

Sources: 1978-1987 data from *Child Support and Alimony*, Series P-23, Nos. 112, 140, 141, 154, 167; and *Current Population Reports*, Series P-60, No. 173; Data for 1991 from *Current Population Reports*, Series P-60, No. 187.

ES 3.1

**PARENTAL LABOR FORCE PARTICIPATION:
PERCENTAGE OF CHILDREN WITH BOTH PARENTS
OR ONLY RESIDENT PARENT IN THE LABOR FORCE**

Over the last three decades, the proportion of single-parent families has increased, as has the proportion of mothers who work regardless of marital status.¹⁰ These factors have reduced the percentage of children who have a parent at home full time. Figure ES 3.1 presents data on the percentage of children who have all resident parents participating in the labor force¹¹ at some level for the years 1985, 1990, and 1994 through 1997.

Parents in the Labor Force by Family Structure. Between 1985 and 1997, the percentage of children who have all resident parents in the labor force increased from 59 percent to 68 percent (see Figure ES 3.1). Between 1990 and 1996, the percentage of children who have all resident parents participating in the labor force was similar for both married-couple families and single-mother families; however, the rate for single-mother families increased sharply from 66 percent in 1996 to 72 percent in 1997, while the rate for married-couple families increased only slightly. The rate for children in single-father families has remained much higher, at 88 percent.

Parents in the Labor Force by Age of Child. Children under age 6 have been less likely than older children to have all resident parents in the labor force (see Table ES 3.1). In 1997, 61 percent of younger children had all resident parents in the labor force, compared with 71 percent for older children.

Parents in the Labor Force by Race and Hispanic Origin. Between 1985 and 1990, white children, black children, and Hispanic children all became more likely to have all their resident parents in the labor force (see Table ES 3.1). Between 1990 and 1996, the rates stayed virtually the same for blacks and Hispanics, and increased modestly for whites; however, the rate for all three groups increased between 1996 and 1997, with especially large increases for blacks. Between 1996 and 1997 the rate for black children of all ages increased from 64 percent to 71 percent, and the rate for black children under age 6 increased from 58 percent to 68 percent. By 1997, 68 percent of white children, 71 percent of black children, and 54 percent of Hispanic children lived in families in which all resident parents were working.

¹⁰ Bianchi, S. M. 1995. "Changing Economic Roles of Women and Men." In *State of the Union: America in the 1990s*, Volume 1. (Reynolds Farley, ed.). New York: Russell Sage Foundation.

¹¹ Participating in the labor force means either working or actively seeking work.

Table ES 3.1

Percentage of children in the United States with both parents or only resident parent in the labor force, by age, family structure, and race and Hispanic origin:^a selected years, 1985-1997

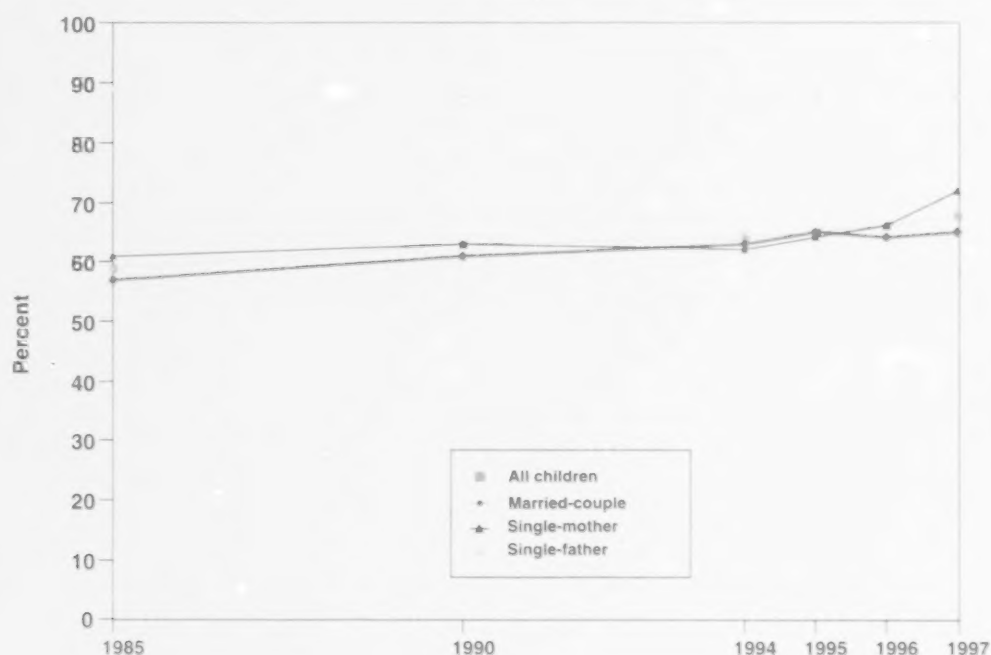
	1985	1990	1994	1995	1996	1997
All children	59	63	64	65	66	68
Under age 6	51	55	56	59	58	61
Ages 6-17	63	67	68	69	70	71
Family structure						
Married-couple	57	61	63	65	64	65
Under age 6	51	54	57	59	58	58
Ages 6-17	61	65	67	68	67	69
Single-mother	61	63	62	64	66	72
Under age 6	49	51	52	54	56	65
Ages 6-17	67	70	68	69	72	76
Single-father	89	88	86	88	88	88
Under age 6	90	90	85	86	86	89
Ages 6-17	89	88	86	88	89	88
Race and Hispanic origin^a						
White	59	63	64	66	66	68
Under age 6	51	55	57	59	58	61
Ages 6-17	63	67	68	70	70	71
Black	60	63	62	64	64	71
Under age 6	54	55	56	57	58	68
Ages 6-17	63	67	66	67	68	73
Hispanic	45	50	49	50	50	54
Under age 6	40	44	41	44	43	49
Ages 6-17	48	54	54	54	55	57

^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Sources: 1985, 1990, 1994 and 1995 statistics calculated by Child Trends, Inc., based on the March 1985, 1990, 1994, and 1995 Current Population Surveys; 1996 and 1997 statistics calculated by the U.S. Bureau of the Census based on the 1996 and 1997 Current Population Surveys.

Figure ES 3.1

Percentage of children under age 18 in the United States with both parents or only resident parent in the labor force, by family structure: selected years, 1985-1997



Sources: 1985, 1990, 1994 and 1995 statistics calculated by Child Trends, Inc., based on the March 1985, 1990, 1994, and 1995 Current Population Surveys; 1996 and 1997 statistics calculated by the U.S. Bureau of the Census based on the 1996 and 1997 Current Population Surveys.

ES 3.2

MATERNAL EMPLOYMENT: PERCENTAGE OF MOTHERS WITH CHILDREN UNDER AGE 18 WHO ARE EMPLOYED, FULL-TIME AND PART-TIME

Over the last several decades, the increasing proportion of mothers moving into employment has had substantial consequences for the everyday lives of families with children. Maternal employment adds to the financial resources available to families, and is often the only source of income for families headed by single mothers--although if child-care services are purchased and unsubsidized, they may offset a substantial percentage of low-wage mothers' earnings.

Maternal employment rates for all mothers with children under age 18 increased steadily from 53 percent to 63 percent between 1980 and 1990 (see Figure ES 3.2.A). From 1990 to 1996, rates increased at a slower pace from 63 percent to 66 percent. This pattern of increasing maternal employment was evident for all mothers, regardless of the age of their children.

Differences by Age of Child. The percentage of mothers who are employed increases with the age of the youngest child for all time periods presented in Table ES 3.2.A. In 1996, 55 percent of mothers with children under age 3 were employed, compared with 63 percent and 74 percent for mothers with youngest children ages 3-5 and 6-17, respectively.

Differences by Race and Hispanic Origin. In 1996, 67 percent of white mothers, 63 percent of black mothers, and 49 percent of Hispanic mothers were employed (see Table ES 3.2.A). Black mothers were the most likely to be employed full-time (52 percent). All three groups substantially increased their rates of employment between 1980 and 1990; however, the rate of employment for Hispanic women has essentially remained unchanged since then. In contrast, the rate of employment for white women has continued to increase, while the rate of employment for black women has grown slightly.

Differences by Marital Status. Throughout the period between 1980 and 1996, divorced mothers had higher rates of employment than never-married or currently married mothers (see Table ES 3.2.A). Employment increased from 62 percent to 68 percent for married mothers, from 40 to 49 percent for never-married mothers, and from 75 to 79 percent for divorced mothers.

Full-Time Versus Part-Time Employment. Among all employed mothers, 71 percent were working full-time in 1996 (see Figure ES 3.2.B). Employed mothers with older children were more likely to work full-time than those with young children, with rates ranging from 66 percent for mothers with children under age 3, to 74 percent for mothers with a youngest child between the ages of 6 and 17. Divorced mothers were more likely to work full-time (84 percent) than never-married mothers (72 percent) and married mothers (68 percent). Black mothers who were employed were more likely to work full-time (83 percent) than white mothers (69 percent) or Hispanic mothers (76 percent).

Table ES 3.2.A

Percentage of mothers in the United States with children under age 18 who were employed, full-time and part-time^a, by age of youngest child, marital status, and race and Hispanic origin:^b selected years, 1980-1996

	1980 ^a	1988	1990	1994	1995	1996
Total employed	53	60	63	64	66	66
Working full-time	—	44	46	45	46	47
Working part-time	—	16	17	19	19	19
Age of youngest child						
Under age 3	37	47	50	52	54	55
Working full-time	—	32	34	34	35	36
Working part-time	—	15	16	18	19	19
Ages 3-5	50	57	61	60	62	63
Working full-time	—	40	43	41	42	43
Working part-time	—	17	18	19	20	20
Ages 6-17	60	70	70	72	73	74
Working full-time	—	53	53	53	53	55
Working part-time	—	17	17	19	19	19
Marital status						
Married, spouse presently employed	62	63	66	67	67	68
Working full-time	—	43	44	45	45	46
Working part-time	—	19	19	21	22	21
Never married	40	45	46	48	48	49
Working full-time	—	32	36	34	35	35
Working part-time	—	8	9	12	13	14
Divorced	75	75	74	77	77	79
Working full-time	—	66	66	63	64	66
Working part-time	—	9	9	11	13	13
Race and Hispanic origin^b						
White	52	62	63	65	67	67
Working full-time	—	44	44	45	46	47
Working part-time	—	18	19	20	21	21
Black	54	56	61	58	62	63
Working full-time	—	48	53	47	50	52
Working part-time	—	8	8	11	11	10
Hispanic	42	49	50	48	49	49
Working full-time	—	38	39	36	37	37
Working part-time	—	11	11	12	12	12

^aPercentages for 1980 are not presented separately by marital status and full-time vs. part-time due to incompatibilities with definitions used in later years. Sums may not add to totals due to rounding.

^bPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Source: Unpublished tables, Bureau of Labor Statistics, based on analyses of March Current Population Surveys for 1980, 1988, 1990, 1994-1996.

Table ES 3.2.B

Number (in thousands) and percentage of employed mothers in the United States who worked full-time, by age of youngest child, marital status, and race and Hispanic origin:^a 1996

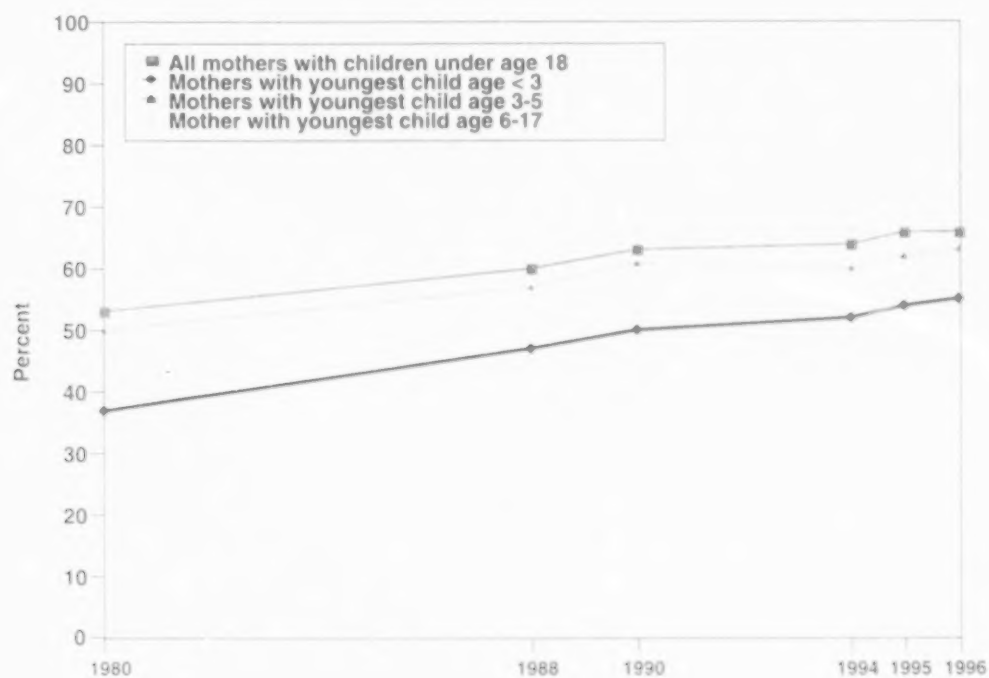
	Full-time	Part-time	Total	Percent Full-time
All mothers	16,712	6,673	23,386	71
Age of youngest child				
Under age 3	3,431	1,791	5,222	66
Ages 3-5	3,007	1,363	4,370	69
Ages 6-17	10,274	3,519	13,794	74
Marital status				
Married	11,737	5,398	17,136	68
Never married	1,317	512	1,829	72
Divorced	2,420	460	2,880	84
Race and Hispanic origin ^a				
White	13,246	5,918	19,164	69
Black	2,644	525	3,170	83
Hispanic	1,654	523	2,177	76

^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Source: Unpublished tables, Bureau of Labor Statistics, based on analysis of March Current Population Survey for 1996.

Figure ES 3.2.A

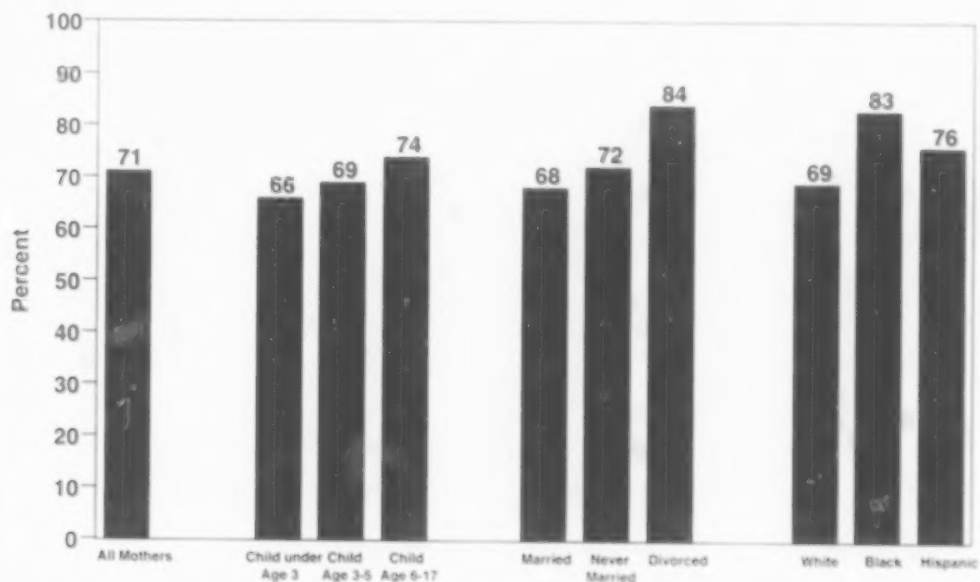
Percentage of mothers in the United States with children under age 18 who were employed, by age of youngest child: selected years, 1980-1996



Source: Unpublished tables, Bureau of Labor Statistics, based on analyses of March Current Population Surveys for 1980, 1988, 1990, 1994-1996.

Figure ES 3.2.B

Percentage of employed mothers in the United States who worked full-time, by age of youngest child, marital status, and race and Hispanic origin:^a 1996



^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Source: Unpublished tables, Bureau of Labor Statistics, based on analyses of March Current Population Surveys for 1980, 1988, 1990, 1994-1996.

ES 3.3

PARENTAL LABOR FORCE DETACHMENT: THE PERCENTAGE OF CHILDREN UNDER AGE 18 WITH NO RESIDENT PARENTS IN THE LABOR FORCE

Attachment to the labor force is, for the vast majority of families, a necessary prerequisite for financial and social stability. Children who have no parents in the labor force are at considerably higher risk of poverty, which can have long-term negative consequences for their well-being.^{12,13}

Figure ES 3.3 presents trends in the proportion of children living in families where there were no resident parents attached to the labor force. Data are presented for 1985, 1990, and 1994 through 1997, by family structure, age of child, and race and Hispanic origin. During that period, approximately 1 in 10 children lived in families in which all resident parents were detached from the labor force. The percentages fluctuated within a narrow range throughout the period.

Labor Force Detachment by Family Structure and Age of Child. The rate of parental labor force detachment for children in married-couple families was very low, fluctuating between 2 and 3 percent between 1985 and 1997; however, detachment rates for children in families headed by single mothers were more than 10 times higher throughout the period. In 1985, 39 percent of children living in single-mother families had a nonworking mother (see Figure ES 3.3). This percentage dropped to 28 percent by 1997. For children under age 6 in single-mother families, the percentage of mothers not working dropped from 51 percent in 1985 to 35 percent in 1997. (see Table ES 3.3).

In families headed by single mothers, mothers of children under age 6 were more likely to be detached from the labor force than mothers of older children. The gap between the two age groups was 11 percentage points in 1997 (35 percent versus 24 percent). Children living in families headed by single fathers experienced parental labor force detachment rates between 11 and 14 percent between 1985 and 1997. This is substantially less than rates experienced by children in families headed by single mothers (12 percent versus 28 percent in 1997), but substantially higher than those in married-couple families (2 percent).

Labor Force Detachment by Race and Hispanic Origin. White children were much less likely than black or Hispanic children to have no resident parents in the labor force in 1997, with rates of 7 percent, 20 percent, and 14 percent, respectively.

¹²Blau, F., and Grossberg, A. 1992. "Maternal Labor Supply and Children's Cognitive Development." *Review of Economics and Statistics* 74, 474-481.

¹³Duncan, G., and Brooks-Gunn, J. 1997. "Income Effects Across the Life Span: Integration and Interpretation." In *Consequences of Growing Up Poor* (G. Duncan and J. Brooks-Gunn, eds.). New York: Russell Sage Press.

Table ES 3.3

Percentage of children in the United States with no resident parent in the labor force, by age, family structure, and race and Hispanic origin:^a selected years, 1985-1997

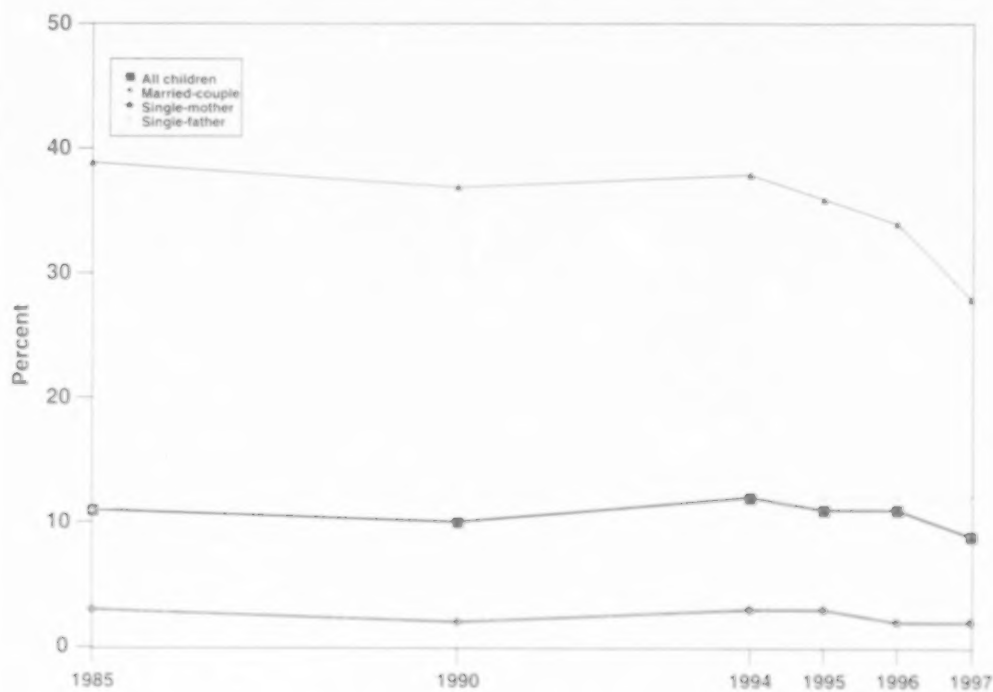
	1985	1990	1994	1995	1996	1997
All children	11	10	12	11	11	9
Under age 6	12	13	14	14	13	10
Ages 6-17	10	9	11	10	9	8
Family structure						
Married-couple	3	2	3	3	2	2
Under age 6	2	2	2	2	2	2
Ages 6-17	3	3	3	3	3	2
Single-mother	39	37	38	36	34	28
Under age 6	51	49	48	46	44	35
Ages 6-17	33	30	32	31	28	24
Single-father	11	12	14	12	12	12
Under age 6	10	10	15	14	14	11
Ages 6-17	11	12	14	12	11	12
Race and Hispanic origin^a						
White	8	7	9	8	7	7
Under age 6	8	9	11	10	9	7
Ages 6-17	7	6	8	7	7	6
Black	27	26	27	27	25	20
Under age 6	33	34	33	33	32	23
Ages 6-17	24	21	24	23	21	18
Hispanic	19	17	19	19	17	14
Under age 6	20	19	22	21	20	15
Ages 6-17	19	16	18	17	15	13

^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Sources: 1985, 1990, 1994 and 1995 statistics calculated by Child Trends, Inc., based on analyses of the March 1985, 1990, 1994, and 1995 Current Population Surveys; 1996 and 1997 statistics calculated by U.S. Bureau of the Census based on the March 1996 and 1997 Current Population Surveys.

Figure ES 3.3

Percentage of children under age 18 in the United States with no resident parent in the labor force, by family structure: selected years, 1985-1997



Sources: 1985, 1990, 1994 and 1995 statistics calculated by Child Trends, Inc., based on analyses of the March 1985, 1990, 1994, and 1995 Current Population Surveys; 1996 and 1997 statistics calculated by U.S. Bureau of the Census based on the March 1996 and 1997 Current Population Surveys.

ES 3.4

**SECURE PARENTAL LABOR FORCE ATTACHMENT:
PERCENTAGE OF CHILDREN WITH AT LEAST ONE FULLY
EMPLOYED (Full-time, Full-year) RESIDENT PARENT**

Parents' full-time employment over the course of an entire year indicates a secure attachment to the labor force and produces a degree of financial security for their children. As shown in Table ES 3.4, the percentage of children in families with at least one securely attached parent increased from 69 percent to 75 percent over the period 1984 to 1996; however, there were substantial and persistent variations in the rate of secure parental attachment to the labor force by race and Hispanic origin, poverty status, age of children, and family structure.

Differences by Race and Hispanic Origin. The parents of children in white families consistently have the highest rates of secure attachment to the labor force. Throughout the entire 1984-1996 period, more than 70 percent of white children had at least one parent with a secure labor force attachment. In 1996, the rate for white children was 79 percent (see Figure ES 3.4). In contrast, 56 percent of black children and 64 percent of Hispanic children lived in families with at least one parent who was securely attached to the labor force.

Differences by Poverty Status. Secure parental labor force attachment is associated with escaping poverty. In 1996, only 25 percent of poor families with children had at least one parent with a secure labor force attachment, while 87 percent of nonpoor families had at least one securely attached parent (see Figure ES 3.4). The percentage of poor families with at least one parent securely attached to the labor force has increased over the period, from 20 percent in 1984 to 25 percent in 1996.

Differences by Age of Children. Secure parental labor force attachment is more common among families with older children. In 1996, 78 percent of families with children ages 12 through 17 had at least one parent who was securely attached to the labor force, compared with 71 percent of families with children under age 6 (see Figure ES 3.4).

Differences by Family Structure. Married-couple families are far more likely than other family types to have at least one parent securely attached to the labor force. In 1996, 88 percent of married-couple families had at least one securely attached parent. In contrast, only 39 percent of the single-mother families and 67 percent of the single-father families had a securely attached parent (see Figure ES 3.4).

Table ES 3.4

Percentage of children in the United States with at least one fully employed (full-time, full-year) resident parent, by race and Hispanic origin,^a poverty status, age, and family structure: selected years, 1984-1996

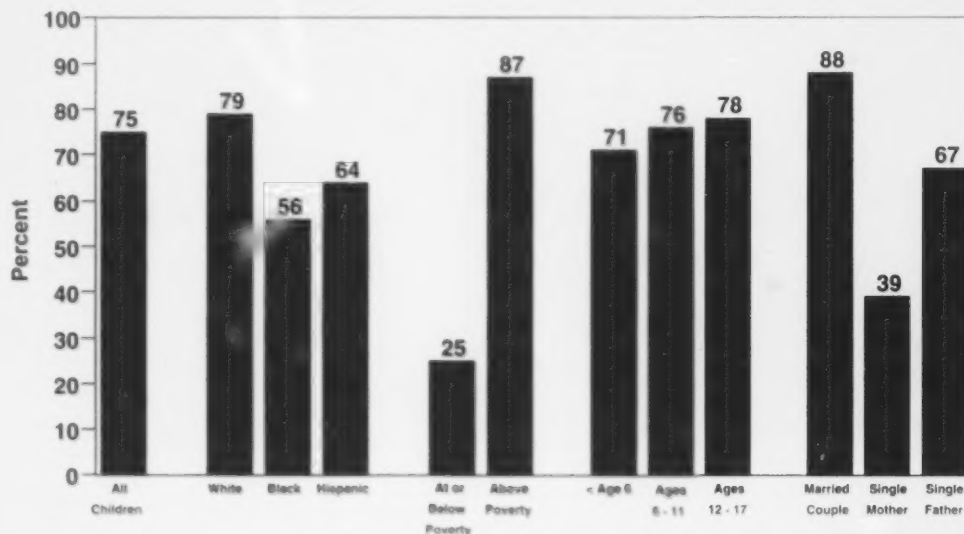
	1984	1989	1993	1994	1995	1996
Total	69	73	71	73	74	75
Race and Hispanic origin^a						
White	73	78	76	77	78	79
Black	48	51	49	52	53	56
Hispanic	58	62	57	59	61	64
Poverty status						
At or below poverty	20	22	21	24	25	25
Above poverty	83	85	85	86	86	87
Child's age						
Under age 6	65	69	67	68	69	71
Ages 6-11	70	74	72	73	75	76
Ages 12-17	73	78	75	76	78	78
Family structure						
Married-couple	80	85	85	86	87	88
Single-mother	32	34	33	35	38	39
Single-father	61	64	61	60	67	67

^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Sources: 1984-1994 statistics calculated by Child Trends, Inc., based on analyses of the March 1985, 1994, and 1995 Current Population Surveys; 1995 and 1996 statistics calculated by U.S. Bureau of the Census based on analyses of the March 1996 and 1997 Current Population Surveys.

Figure ES 3.4

Percentage of children under age 18 in the United States with at least one fully employed (full-time, full-year) resident parent, by race and Hispanic origin,^a poverty status, age, and family structure: 1996



^aPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Source: 1984-1994 statistics calculated by Child Trends, Inc., based on analyses of the March 1985, 1994, and 1995 Current Population Surveys; 1995 and 1996 statistics calculated by U.S. Bureau of the Census based on analyses of the March 1996 and 1997 Current Population Surveys.

ES 3.5

CHILD CARE

The child care needs of American families have been increasing over the past several decades as mothers have moved into the labor force in ever greater numbers. Child care that is reliable and of high quality is especially important for infants and preschoolers because they are dependent on caregivers for their basic needs and safety. Yet, the quality of care varies substantially in the United States.³⁴ Research has clearly demonstrated that child care quality can have substantial impacts on the development of a young child's personality, cognitive skills, social skills, and well-being.

Child Care Centers and Preschools. Working mothers with preschool children have increasingly chosen care provided in day care centers and preschools. In 1965, only 8 percent of mothers working full-time chose day care centers and preschools for child care (see Table ES 3.5.A). By 1994, 34 percent did so. Similarly, for children whose mothers worked part-time, use of child care centers and preschools increased from 3 percent in 1965 to 22 percent in 1994.

Child Care in a Nonrelative's Home. For children of full-time working mothers, care in a nonrelative's home peaked at 27 percent in the mid-1980s, then declined to 18 percent by 1994. Similarly, for children whose mothers worked part-time, care in a nonrelative's home peaked at 19 percent in 1982 and has since declined to 10 percent.

Child Care at Home. The fraction of children of full-time working mothers cared for at home by either relatives or nonrelatives was 26 percent in 1994, compared with 21 percent in 1988 and 47 percent in 1965. The fraction of children of part-time working mothers cared for at home was 45 percent in 1994, compared with 40 percent in 1984-1985 and 47 percent in 1965 (see Table ES 3.5.A).

Child Care Arrangements by Various Child and Family Characteristics. Table ES 3.5.B presents 1994 estimates of the distribution of child care types used by all working mothers (regardless of hours worked) by child's race and Hispanic origin and age, mother's marital status and educational attainment, poverty status, monthly income, and AFDC program participation status. The information in this table indicates the following:

- Relatives usually care for employed mothers' children before their first birthday. In 1994, 56 percent of infants were cared for by relatives either inside or outside the child's home (see Figure ES 3.5). About one-quarter were cared for by nonrelatives inside or outside the child's home, and only 18 percent were cared for in day care centers or preschools. Among toddlers (ages 1-2), about half (51 percent) were cared for by relatives, while the other half were split about evenly between day care centers and preschools (26 percent) and nonrelatives (22 percent). Among children of preschool age (ages 3-4), 44 percent were cared for by relatives, another 37 percent in day care centers and preschools, and 16 percent were cared for by nonrelatives.
- Hispanic families were less likely than white and black non-Hispanics to use day care centers and preschools. In 1994, 19 percent of Hispanic children of working mothers were cared for in day care centers and preschools, compared with 31 percent of non-Hispanic white children and 34 percent of non-Hispanic black children.
- Children of employed mothers with higher socioeconomic status were the most likely to be receiving care from a day care center or preschool. For example, 22 percent of poor children under age 5 received care from such sources, compared with 30 percent of non-poor children. Only 20 percent of children whose mothers had less than a high school diploma received care from a day care center or preschool, compared with 35 percent of children whose mothers had a college degree. In contrast, 63 percent of children of poor mothers were cared for by relatives, compared with only 48 percent of children of nonpoor mothers; and 64 percent of

³⁴Whitebook, M., Phillips, D., and Howes, C. 1989. *National Child Care Staffing Study*. Oakland, CA: Child Care Employees Project; Hayes, C.D., Palmer, J.L., and Zaslow, M.J. (eds.). 1990. *Who Cares for America's Children? Child Care Policy for the 1990s*. Washington, D.C.: National Academy Press.

children of working mothers without a high school diploma were cared for by relatives, compared with only 38 percent of children of mothers with a college degree.

- Children whose families participated in the Aid to Families with Dependent Children (AFDC) program were about as likely as other children to attend day care centers or preschools (27 percent for participants versus 29 percent for nonparticipants). They were somewhat less likely to be cared for by their fathers (15 percent for participants versus 19 percent for nonparticipants) and more likely to be cared for by their grandparents (21 percent for participants versus 16 percent for nonparticipants).³⁵

Table ES 3.5.A

Percentage of children under age 5 in the United States with employed mothers, by employment status and child care arrangement: selected years, 1965-1994

	1965 ^{a,b}	1977 ^b	1982 ^b	1984-85	1988	1991	1993	1994
Mother employed full-time								
Day care center or preschool	8	15	20	30	31	28	34	34
Nonrelative care in provider's home	20	27	25	27	27	21	18	18
Grandparent/other relative in relative's home	18	21	21	16	14	14	17	17
Father in child's home	10	11	11	10	8	15	11	13
Other care in child's home ^c	37	18	16	13	13	15	15	13
Other care outside child's home ^d	7	8	7	4	7	7	5	5
Mother employed part-time								
Day care center or preschool	3	9	8	17	17	15	23	22
Nonrelative care in provider's home	8	16	19	14	17	13	14	10
Grandparent/other relative in relative's home	9	13	16	16	11	11	13	13
Father in child's home	23	23	21	22	27	29	25	28
Other care in child's home ^c	24	20	20	18	14	17	15	17
Other care outside child's home ^d	33	19	26	13	14	15	10	10

^aData for 1965 are for children under 6 years old.

^bData for 1982 and earlier are based on survey questions that asked about care arrangements for the youngest child in the family. Percentages for 1982 and earlier have been recalculated after removal of cases in "don't know" category.

^cIncludes care by relatives and nonrelatives.

^dIncludes children who are cared for by their mother at work, or in kindergarten or school-based activities.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-23, No. 117; U. S. Bureau of the Census, *Current Population Reports*, Series P-70, No. 9, No. 20, No. 30, No. 36, No. 53; U.S. Bureau of the Census; Casper, L.M. 1997. "Who's Minding Our Preschoolers? Fall 1994 (Update)." *Current Population Reports*, P70-62 and PPL-81. Washington, D.C.: U.S. Bureau of the Census.

³⁵Statistics for grandparents provided in Casper, Lynne M. 1997. "Who's Minding Our Preschoolers? Fall 1994 (Update)." *Current Population Reports*, Supplementary Tables, PPL-81. Washington, D.C.: U.S. Bureau of the Census.

Table ES 3.5.B

Percentage of children under age 5 in the United State with employed mothers, by child care arrangement and selected characteristics: 1994

	Day Care Center/ Preschool ^a	Father in Child's Home	Other Relative in Child's Home	Nonrelative in Child's Home	Relative in Another Home	Nonrelative in Another Home	Mother Cares for Child ^b	Other Care Arrangements ^c
All preschoolers	29	18	9	5	16	15	5	1
Race and Hispanic origin								
White, non-Hispanic	31	20	7	6	14	16	7	1
Black, non-Hispanic	34	11	13	2	23	13	3	2
Hispanic ^d	19	17	15	6	24	15	2	2
Other	21	22	19	6	12	15	3	2
Age of child								
Under 1 year	18	21	11	7	17	19	7	0
Ages 1-2	26	19	10	5	18	17	4	0
Ages 3-4	37	17	8	4	13	12	6	2
Marital status								
Married, husband present	29	22	6	6	14	16	6	1
All other marital statuses ^e	31	5	21	3	22	15	3	1
Educational attainment								
Less than high school	20	24	15	4	20	12	5	1
High school, 4 years	26	17	11	3	19	16	5	1
College, 1-3 years	32	21	7	4	14	14	6	1
College, 4 or more years	35	15	6	9	11	17	5	1
Poverty status^f								
Below poverty	22	18	15	4	20	11	10	1
Above poverty	30	19	9	5	15	16	5	1
Monthly family income^g								
Less than \$1,200	24	17	11	4	22	15	6	1
\$1,200 to \$2,999	26	22	10	3	19	13	6	1
\$3,000 to \$4,499	27	19	10	4	15	18	6	2
\$4,500 and over	36	15	7	9	12	16	5	1
Program participation								
AFDC recipient	27	15	17	3	18	11	6	2
AFDC nonrecipient	29	19	9	5	16	16	5	1

^aIncludes day care centers, nursery schools, and preschools.

^bIncludes mothers working at home or away from home.

^cIncludes preschoolers in kindergarten and school-based activities.

^dPersons of Hispanic origin may be of any race.

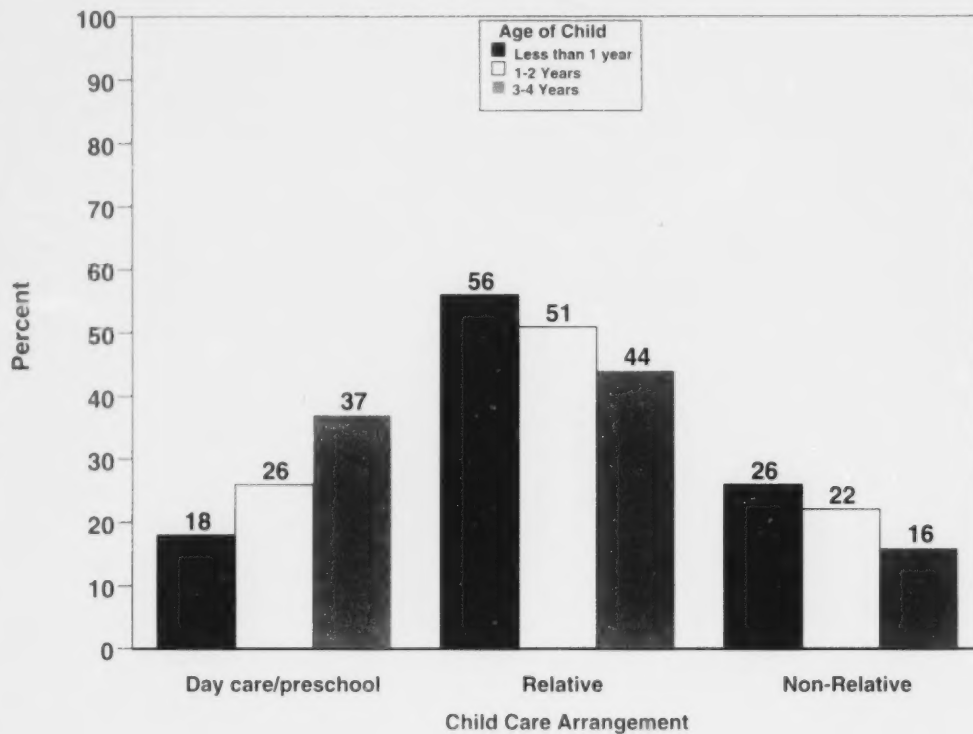
^eIncludes married, spouse absent, widowed, separated, divorced, and never married.

^fOmits preschoolers whose families did not report income.

Source: Casper, Lynne M. 1997. "Who's Minding Our Preschoolers? Fall 1994 (Update)." *Current Population Reports*, P70-62 and PPL-81. Washington, D.C.: U.S. Bureau of the Census.

Figure ES 3.5

Percentage of children under age 5 in the United States with employed mothers, by child care arrangement and by age of child: 1994



Source: Casper, Lynne M. 1997. "Who's Minding Our Preschoolers? Fall 1994 (Update)." *Current Population Reports*, P70-62 and PPL-81. Washington, D.C.: U.S. Bureau of the Census.

ES 3.6

DETACHED YOUTH: PERCENTAGE OF 16- THROUGH 19-YEAR-OLDS NOT IN SCHOOL AND NOT WORKING

"Detached youth" refers to young people ages 16 through 19 who are neither enrolled in school nor working. This detachment, particularly if it lasts for several years, increases the risk that a young person, over time, will have lower earnings and a less stable employment history than his or her peers who stayed in school and/or secured jobs.³⁶

Since 1985, the percentage of detached youth has fluctuated between 9 and 11 percent (see Table ES 3.6). In 1996, 9 percent of all youth ages 16 through 19 were detached.

Differences by Sex. Young women are more likely than young men to be detached from both school and employment. In 1996, 11 percent of young women but only 8 percent of young men experienced detachment.

Differences by Race and Hispanic Origin. Black and Hispanic youth are more likely than white youth to be detached from school and employment. In 1996, 14 percent of black youth and 16 percent of Hispanic youth experienced detachment. The corresponding rate for white youth was 8 percent.

Table ES 3.6

Percentage of 16- through 19-year-olds in the United States who are neither enrolled in school nor working,^a by gender and by race and Hispanic origin:^b selected years, 1985-1996

	1985	1990	1991	1992	1993	1994	1995	1996
All youth	11	10	10	10	9	10	9	9
Gender								
Male	9	8	9	8	8	8	8	8
Female	13	12	13	12	11	11	11	11
Race and Hispanic origin								
White	10	9	9	9	8	9	8	8
Black	18	15	17	17	15	14	15	14
Hispanic	17	17	16	16	16	17	16	16

^aThe figures represent a yearly average based on responses for the nine months youth typically are in school (September through May). Youth are asked about their activities for the week prior to the survey.

^bPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

Source: Special tabulations of the Current Population Survey prepared by the Bureau of Labor Statistics.

³⁶Brown, B. 1996. "Who Are America's Disconnected Youth?" Report prepared for the American Enterprise Institute.

ES 4.1

INADEQUATE HOUSING

Housing is a major expense for most families; however, spending more than 30 percent of income on housing may compromise the budget for other essential goods and services. A home's physical condition, its safety, the level of crowding in a household, and the quality of the surrounding neighborhood can all affect children's well-being.³⁷ This section presents recent trends in both the cost burden and the physical quality of housing for all households with children under age 18 and for renter households with children and very low income.

Cost burden. The share of all households (containing children) spending at least 30 percent of their incomes on housing increased from 15 percent in 1978 to 28 percent in 1995, while the share spending at least half their income on housing doubled from 6 percent in 1978 to 12 percent in 1995 (see Table ES 4.1). For renter households with children and very low income³⁸ the trend was similar, but housing expenses were a much higher share of income. Between 1978 and 1995 the percentage of renter households (with children and very low income) paying at least 30 percent of their income on housing rose from 59 percent to 68 percent (with the entire increase occurring between 1978 and 1983), while the percentage spending at least 50 percent rose from 31 percent to 38 percent.

Physical problems. During this same period, the percentage of households (containing children) living in housing with moderate to severe physical problems³⁹ declined from 9 percent in 1978 to 7 percent in 1995.⁴⁰ For renter households (with children and very low income), the percentage living in housing with moderate to severe physical problems declined from 18 percent in 1978 to 13 percent in 1995.

Differences by type of family. Married-couple families with children are the least likely to experience housing with physical problems, followed by households with one or no adult, and households with two or more adults who are not married. In 1995, for example, 6 percent of married-couple households with children, 10 percent of households with one or no adult, and 10 percent of households with two or more unmarried adults lived in housing with moderate to severe physical problems (see Figure ES 4.1.a). Similarly, among all households with children, married-couples are the least likely to be paying over 30 percent of their income on housing. For example, in 1995, 21 percent of married-couple households paid over 30 percent, compared with 51 percent of households with one or no adult and 34 percent of households with two or more unmarried adults (see Figure ES 4.1.b).

³⁷ Moore, K., Zaslow, M.J., Coiro, M., Miller, S.M., and Magenheimer, E. 1996. *The Jobs Evaluation: How Are They Faring? AFDC Families with Preschool-Aged Children in Atlanta at the Outset of the JOBS Evaluation*. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation; Blackman, T., Evason, E., Melaugh, M., and Woods, R. 1989. "Housing and Health: A Case Study of Two Areas in West Belfast." *Journal of Social Policy* 18(1):1-26.

³⁸ Very low income households are those with incomes at or below one-half the median income in a geographic area.

³⁹ Physical problems include plumbing, heating, electricity, upkeep, and/or hallways. For detailed definitions of "moderate" and "severe" physical problems, see U.S. Bureau of the Census and U.S. Department of Housing and Urban Development, 1997, *Current Housing Reports H150:95R1*, "American Housing Survey for the United States in 1995," Washington, D.C., pp. A-13 and A-14.

⁴⁰ This apparently downward trend may not be statistically significant.

Table ES 4.1

Percentage of households with children under age 18 in the United States having selected housing problems,^a all households and very low income^b renter households: selected years, 1978-1995

	1978	1983	1989	1993	1995
Household type					
All households with children					
Number of households (in thousands)	32,267	33,584	35,735	35,462	37,264
Percentage with					
Moderate or severe physical problems	9	8	9	7	7
Cost burden greater than 30 percent	15	21	24	27	28
Cost burden greater than 50 percent	6	11	9	11	12
Renter households with children and very low income					
Number of households (in thousands)	4,176	5,091	5,892	6,653	6,508
Percentage with					
Moderate or severe physical problems	18	18	18	14	13
Cost burden greater than 30 percent	59	68	67	67	68
Cost burden greater than 50 percent	31	38	36	38	38

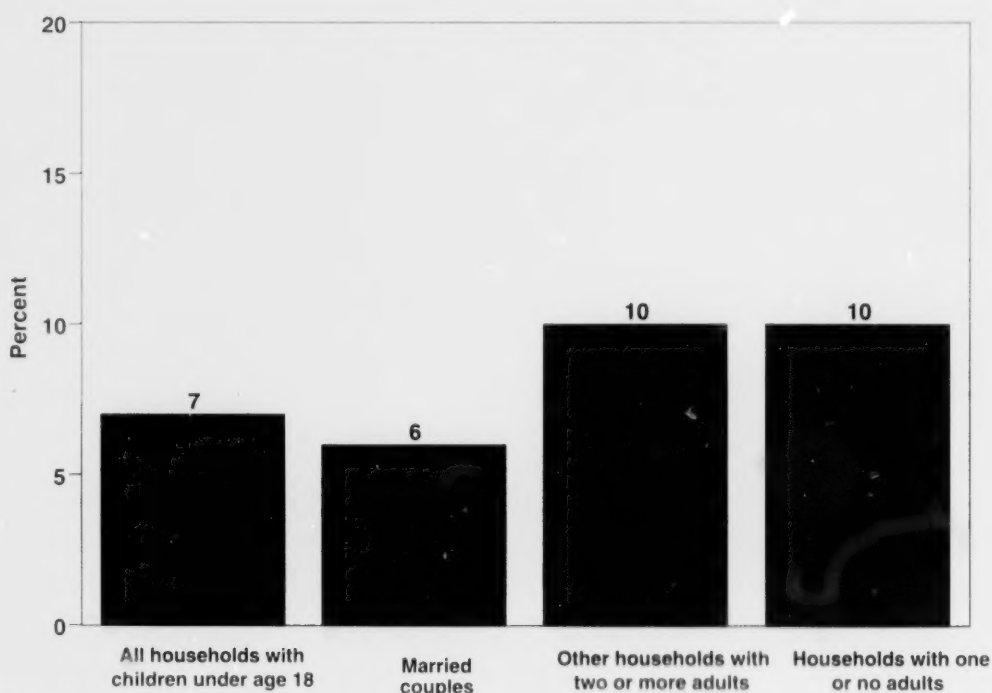
^aHousing problems include *physical problems* and *excessive cost burden*. Physical problems include plumbing, heating, electricity, upkeep, and/or condition of apartment hallways. For detailed definitions of "moderate" and "severe" physical problems, see U.S. Bureau of the Census and U.S. Department of Housing and Urban Development (1997), *Current Housing Reports H150/95R1*, "American Housing Survey for the United States in 1995," Washington, D.C., pp. A-13 and A-14. Cost burden is the ratio of housing costs to reported household income.

^bVery low income households are those with incomes at or below one-half the median income in a geographic area.

Source: U.S. Department of Housing and Urban Development, unpublished tabulations of data from the American Housing Survey for the United States, 1978, 1983, 1989, 1993, and 1995.

Figure ES 4.1.A

Percentage of households with children under age 18 in the United States living in housing with moderate to severe physical problems:^a 1995

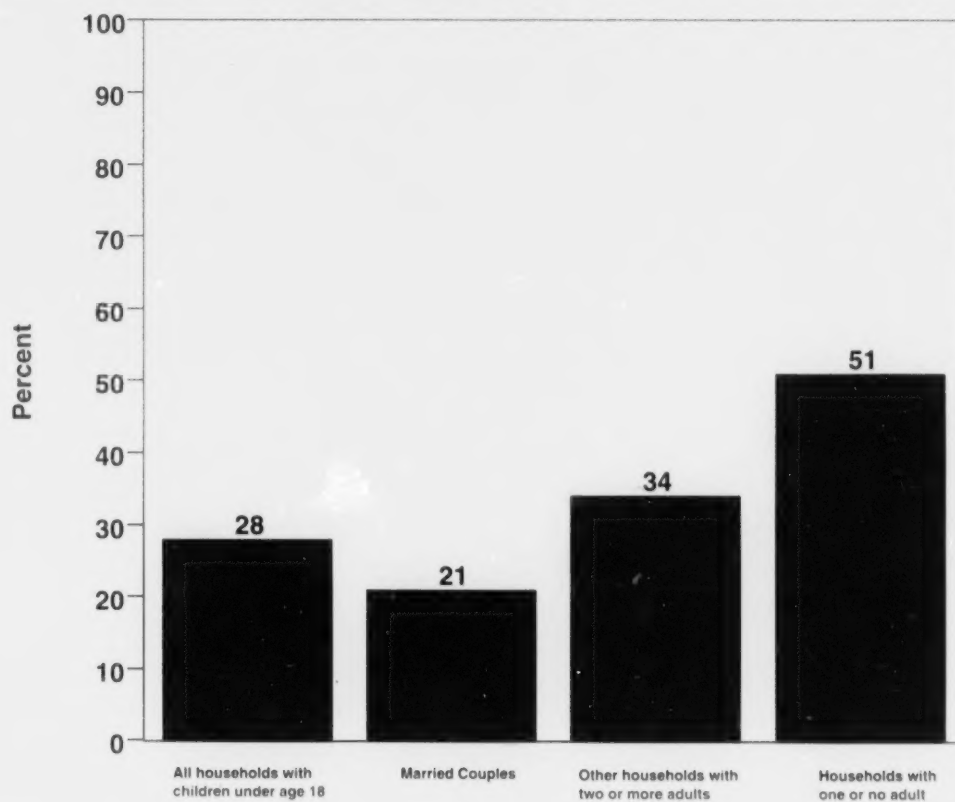


Physical problems include plumbing, heating, electricity, upkeep, and/or condition of apartment hallways. For detailed definitions of "moderate" and "severe" physical problems, see U.S. Bureau of the Census and U.S. Department of Housing and Urban Development (1997), *Current Housing Reports H150/95R1*, "American Housing Survey for the United States in 1995," Washington, D.C., pp. A-13 and A-14.

Source: U.S. Department of Housing and Urban Development, unpublished tabulations of data from the American Housing Survey for the United States, 1995.

Figure ES 4.1.B

Percentage of households containing children under age 18 and paying over 30 percent of their income on housing



Source: U.S. Department of Housing and Urban Development, unpublished tabulations of data from the American Housing Survey for the United States, 1995.

ES 4.2

FOOD SECURITY⁴¹

Children's good health and development depend on a diet sufficient in nutrients and calories. Food security has been defined as access at all times to enough nourishment for an active, healthy life. At a minimum, food security includes the ready availability of sufficient, nutritionally adequate and safe food, and the assurance that families can obtain adequate food without relying on emergency feeding programs or resorting to scavenging, stealing, or other desperate efforts to secure food.⁴² A family's ability to provide for children's nutritional needs is linked to income or other resources and secure access to adequate, nutritious food.

Members of food insecure households are at risk of hunger, that is the uneasy or painful sensation caused by a lack of food. The following indicator measures food insecurity on a scale which indicates increasing levels of severity of food insecurity and accompanying hunger. Food insecure households without hunger report having difficulty obtaining enough food, reduced quality of diets, anxiety about their food supply, and increased resort to emergency food sources and other coping behaviors, but do not report hunger to a significant degree; however, food insecure households with moderate and severe hunger report food insecurity with increasing levels of severity.⁴³

- In 1995, 6.1 percent of children lived in households experiencing food insecurity with moderate or severe hunger; 5.1 percent experiencing food insecurity with moderate hunger and 1.0 percent experiencing severe hunger (see Figure ES 4.2 and Table ES 4.2).
- Poor children are much more likely than others to live in households experiencing food insecurity with moderate to severe hunger. In 1995, 15.6 percent of children in homes with incomes below the federal poverty level lived in households experiencing food insecurity with moderate to severe hunger, compared to 3.0 percent of children in non-poor households
- Most food-insecure households do not report actual hunger for household members. In 1995, 13.4% of all children and 29.0% of poor children lived in households experiencing food-insecurity without hunger evident.
- The number of children who actually experience hunger themselves, even though they may live in a food insecure household where one or more family members experience hunger, is believed to be significantly smaller than the total number of children living in such households. This is because in most such households the adults go without food, if necessary, in order that the children will have food.

⁴¹We wish to thank the Food and Nutrition Service, U.S. Department of Agriculture for providing a draft of the text as well as the statistics used in this section.

⁴²Life Sciences Research Office and American Institute of Nutrition (1990). *Core indicators of nutritional state for difficult to sample populations*. Bethesda, MD: Life Sciences Research Office and American Institute of Nutrition.

⁴³See the note to Table ES 4.2 for a description of the Food Security Supplement to the Current Population Survey and for details on the food security scale.

Table ES 4.2

Percentage of children under age 18 in the United States living in households experiencing food insecurity at two ranges of severity, by poverty status: 1995

Poverty level	Food Insecure Without Hunger	Food Insecure with Moderate Hunger	Food Insecure with Severe Hunger	Food Insecure with Moderate or Severe Hunger
All children	13.4	5.1	1.0	6.1
Children below poverty line	29.0	12.8	2.8	15.6
Children at or above poverty line	8.5	2.6	0.4	3.0

Note: The *Food Security Supplement* is a new survey instrument developed through a long and rigorous process. The content of the survey is based on material reported in prior research on hunger and food insecurity and subjected to extensive testing by the U.S. Bureau of the Census. It was developed through the consensus of nearly 100 experts convened at the 1994 Food Security Measurement and Research Conference convened jointly by the National Center for Health Statistics of the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services and the Food and Nutrition Service of the U. S. Department of Agriculture. The survey was further developed, tested, and refined in the next year by Conferees, members of a federal interagency working group, and survey method specialists from the Census Bureau's Center for Survey Method Research. The survey contains a systematic set of questions intended to identify levels of food insecurity on both a 12-month and a 30-day basis. Data presented in this report are 12-month data. Approximately 53,700 households completed the April 1995 basic CPS questionnaire, and were invited to answer the Food Security Supplement. Of these, 44,730 households completed the supplement, implying a non-interview rate of 16.7% below the basic CPS sample. The respondents completing the supplement included households at all income levels, both above and below the federal poverty thresholds. Special weights were computed to adjust the final supplement sample for the demographic characteristics of supplement non-interviews.

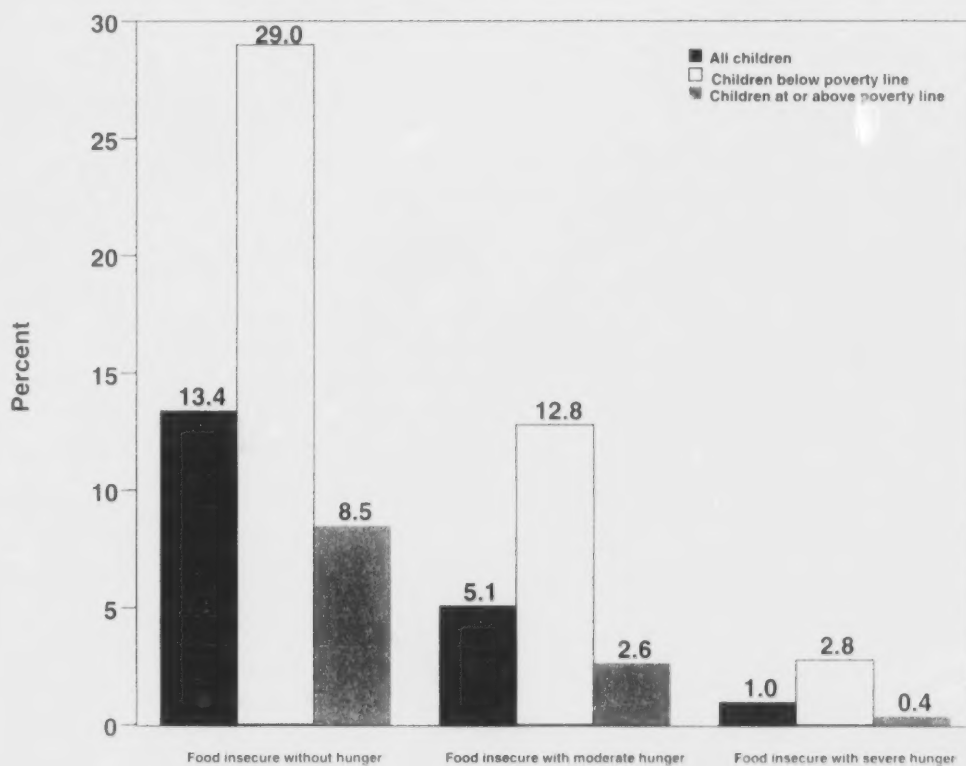
The *food security scale* provides a near-continuous measure of the level of food insecurity and hunger experienced within each household. A categorical measure based on the scale classifies households according to four designated levels of household food security: food secure, food insecure without hunger, food insecure with moderate hunger, and food insecure with severe hunger. Food secure households are households which do not report a significant number of instances of difficulty obtaining enough quality food. Food insecure households without hunger report having difficulty obtaining enough food, reduced quality of diets, anxiety about their food supply, and increasing resort to emergency food sources and other coping behaviors, but do not report hunger to a significant degree. Food insecure households with moderate hunger report food insecurity and significant instances of hunger for one or more adults and, in some cases, for children. Food insecure households with severe hunger report food insecurity and significant instances of hunger for adults and children. For a detailed explanation of the new USDA/DHHS Food Security Measurement scale, see *Household Food Security in the United States in 1995* (USDA, Food and Nutrition Service, 1997.)

Source: Food Security Supplement to the April 1995 Current Population Survey.

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Figure ES 4.2

Percentage of children under age 18 in the United States living in households experiencing food insecurity at two ranges of severity, by poverty status: 1995



Source: Food Security Supplement to the April 1995 Current Population Survey.



Health Conditions and Health Care

HC 1.1

INFANT MORTALITY

Infancy is commonly divided into the neonatal period, the first 27 days of life, and the postneonatal period, 28 days to less than one year. About two-thirds of infant deaths occur during the neonatal period (although advances in neonatology in recent decades have greatly improved the chances that infants will survive this period). The three leading causes of death to infants (one year and younger) are congenital anomalies, disorders relating to a short gestation period and low birth weight, and sudden infant death syndrome (SIDS).¹ In 1995, SIDS dropped from the second to the third leading cause of infant mortality. The SIDS decline accounted for nearly one-third of the total drop in infant mortality in 1995.² Infant deaths due to SIDS declined an additional 15 percent in 1996.³

The U.S. infant mortality rate has decreased rapidly over the past three decades largely due to medical developments over this time. Between 1960 and 1996 the rate fell from 26.0 to 7.2 infant deaths per thousand live births (see Figure HC 1.1.A).⁴ There was a steep decline in the rate of neonatal deaths (from 18.7 to 4.7 infant deaths per thousand live births) and a smaller, more gradual decline in the rate of postneonatal deaths (from 7.3 to 2.5 infant deaths per thousand live births).

International Comparisons. Despite declines in recent decades, the U.S. infant mortality rate ranks among the highest of industrialized nations. For example, in 1993, the rate of infant deaths per thousand live births was 4.4 in Japan, 5.8 in Germany, 6.2 in England and Wales, and 6.8 in France, compared with 8.4 deaths per thousand live births in the United States in that year.⁵ The Russian Federation, in contrast, had an infant mortality rate of 20.3 deaths per thousand live births in 1993.

Differences by Race and Hispanic Origin. While infant mortality rates have declined for all races and ethnic groups in the United States, there is, nevertheless, considerable variation by race and Hispanic origin (see Figure HC 1.1.B). Specifically:⁶

- For white infants, the infant mortality rate declined by 74 percent between 1960 and 1996 — from 22.9 to 6.0 deaths per thousand live births (see Table HC 1.1.A).
- For black infants, the infant mortality rate declined by 68 percent between 1960 and 1996 — from 44.3 to 14.2 deaths per thousand live births (see Table HC 1.1.A).
- For Hispanic infants, the infant mortality rate declined by 33 percent between 1985 and 1996 — from 8.6 to 5.8 deaths per thousand live births (see Table HC 1.1.A).
- For Asian⁷ infants, the infant mortality rate declined by 36 percent from an average of 8.3 deaths per thousand live births during the period 1983-1985 to 5.3 deaths per thousand live births in 1995 (see Table HC 1.1.B).⁷
- For American Indian⁸ infants, the infant mortality rate declined by 35 percent from an average of 13.9 deaths per thousand live births during the period 1983-1985 to 9.0 deaths per thousand live births in 1995 (see Table HC 1.1.B).

¹Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997.

²Press release from the U.S. Department of Health and Human Services. "Reduction in SIDS Deaths Helps Bring Low Infant Mortality." October 9, 1996.

³Because 1996 data are preliminary, part of the decline reported for SIDS deaths may be due to delays in receiving cause-of-death information. As reported in Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997.

⁴Data for 1996 are preliminary.

⁵National Center for Health Statistics. *Health, United States, 1996-97*. Hyattsville, Md.: 1997.

⁶Includes Pacific Islanders.

⁷Infant mortality data for Asians/Pacific Islanders and American Indians/Alaskan Natives are presented from the National Linked Files of Live Births and Infant Deaths in Table HC 1.1.A. Rather than relying solely on the often inaccurate reporting of race on death certificates of infants, the linked files use race from birth certificates and, therefore, provide more accurate data for these populations. The National Linked Files of Live Births and Infant Deaths data are available from 1983-1991 and 1995, when they began being produced on a regular basis again.

⁸Includes Alaskan Natives.

Table HC 1.1.A

Infant, neonatal, and postneonatal mortality rates (deaths per 1,000 live births) in the United States, by race and Hispanic origin:^a selected years, 1960-1996^b

	1960 ^{c,d}	1970	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^e
Infant^f	26.0	20.0	12.6	10.6	9.2	8.9	8.5	8.4	8.0	7.6	7.2
White	22.9	17.6	10.9	9.2	7.6	7.3	6.9	6.8	6.6	6.3	6.0
Black	44.3	33.3	22.2	19.0	18.0	17.6	16.8	16.5	15.8	15.1	14.2
Hispanic	—	—	—	8.6	7.8	7.5	6.8	6.7	6.5	6.1	5.8
Neonatal^f	18.7	15.1	8.5	7.0	5.8	5.6	5.4	5.3	5.1	4.9	4.7
White	17.2	13.7	7.4	6.0	4.8	4.5	4.3	4.3	4.2	4.1	3.9
Black	27.8	23.2	14.6	12.6	11.6	11.2	10.8	10.7	10.2	9.8	9.2
Hispanic	—	—	—	5.4	5.0	4.6	4.3	4.1	4.1	4.0	3.7
Postneonatal^g	7.3	4.9	4.1	3.7	3.4	3.4	3.1	3.1	2.9	2.7	2.5
White	5.7	4.0	3.5	3.2	2.8	2.8	2.6	2.5	2.4	2.2	2.1
Black	16.5	10.1	7.6	6.4	6.4	6.3	6.0	5.8	5.6	5.3	5.0
Hispanic	—	—	—	3.2	2.8	2.8	2.5	2.6	2.5	2.1	2.1

^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race. Hispanic rates not available prior to 1985. Infant mortality by Hispanic origin reported by 17 states and the District of Columbia in 1985, 45 states, New York State (excluding New York City), and the District of Columbia in 1990, 47 states, New York State (excluding New York City), and the District of Columbia in 1991, 48 states and the District of Columbia in 1992, and 49 states and the District of Columbia since 1993.

^bData for 1996 are preliminary.

^cIncludes births and deaths of persons who were not residents of the 50 states and the District of Columbia.

^dData for 1960 are by race of child; all other years are by race of mother.

^eUnder one year old.

^fUnder 28 days old.

^gTwenty-eight days to one year old.

Sources: Anderson, R.N., Kochanek, K.D., and Murphy, S.L. "Report of Final Mortality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report; 1970 data from the National Center for Health Statistics. *Vital Statistics of the United States, 1991*. Vol. II, Mortality, Part A. Washington, D.C.: Public Health Service, 1996 (table 2-2).

Table HC 1.1.B

Infant mortality rates (deaths per 1,000 live births) in the United States, by detailed race and Hispanic origin:^a selected years, 1983-1995

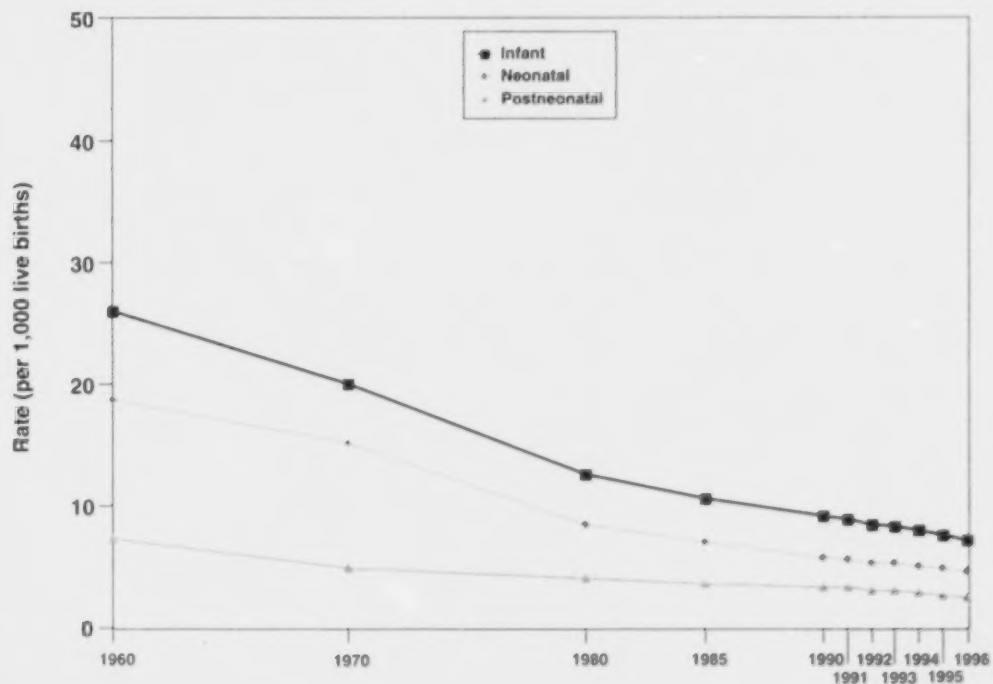
	1983-1985	1986-1988	1989-1991	1995
Infant (all races)	10.6	9.8	9.0	7.6
White	9.0	8.2	7.4	6.3
Black	18.7	17.9	17.1	14.6
American Indian/Alaskan Native	13.9	13.2	12.6	9.0
Asian/Pacific Islander	8.3	7.3	6.6	5.3
Chinese	7.4	5.8	5.1	3.8
Japanese	6.0	6.9	5.3	5.3
Filipino	8.2	6.9	6.4	5.6
Hawaiian and part Hawaiian	11.3	11.1	9.0	6.6
Other Asian or Pacific Islander	8.6	7.6	7.0	5.5
Hispanic	9.2	8.3	7.6	6.3
Mexican American	8.8	7.9	7.2	6.0
Puerto Rican	12.3	11.1	10.4	8.9
Cuban	8.0	7.3	6.2	5.3
Central and South American	8.2	7.6	6.6	5.5
Other and Unknown Hispanic	9.9	9.0	8.2	7.4

^aEstimates for separate race groups include Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics for the National Linked Files of Live Births and Infant Deaths.

Figure HC 1.1.A

Infant, neonatal, and postneonatal mortality rates (deaths per 1,000 live births) in the United States: selected years, 1960^{a,b}-1996^c



^aIncludes births and deaths of persons who were not residents of the 50 states and the District of Columbia.

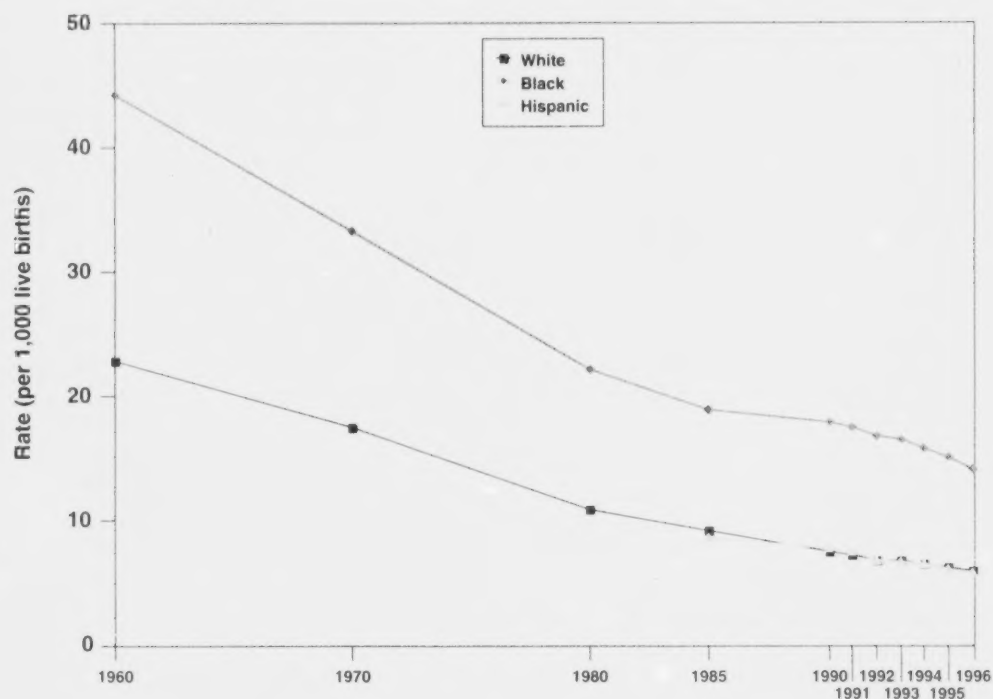
^bData for 1960 are by race of child; all other years are by race of mother.

^cData for 1996 are preliminary.

Sources: Anderson, R.N., Kochanek, K.D., and Murphy, S.L. "Report of Final Mortality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report; 1970 data from the National Center for Health Statistics. *Vital Statistics of the United States, 1991*. Vol. II, Mortality, Part A. Washington, D.C.: Public Health Service, 1996 (table 2-2).

Figure HC 1.1.B

Infant mortality rates (deaths per 1,000 live births) in the United States, by race and Hispanic origin:^a selected years, 1960^{b,c}-1996^d



^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race. Hispanic rates not available prior to 1985. Infant mortality by Hispanic-origin reported by 17 states and the District of Columbia in 1985; 45 states, New York State (excluding New York City), and the District of Columbia in 1990; 47 states, New York State (excluding New York City), and the District of Columbia in 1991; 48 states and the District of Columbia in 1992; and 49 states and the District of Columbia since 1993.

^bIncludes births and deaths of persons who were not residents of the 50 states and the District of Columbia.

^cData for 1960 are by race of child; all other years are by race of mother.

^dData for 1996 are preliminary.

Sources: Anderson, R.N., Kochanek, K.D., and Murphy, S.L. "Report of Final Mortality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report; 1970 data from the National Center for Health Statistics. *Vital Statistics of the United States, 1991*. Vol. II, Mortality, Part A. Washington, D.C.: Public Health Service, 1996 (table 2-2).

HC 1.2

CHILD AND YOUTH DEATHS

Injuries are a common cause of death for children of all ages.⁹ Among children ages one to four, unintentional injuries were the leading cause of death followed by congenital anomalies, malignant neoplasms, homicide and legal intervention, and diseases of the heart.¹⁰ In 1995, all injuries, including homicides and suicides, accounted for 52 percent of deaths to children ages 5 through 14, and 79 percent of all deaths to youth ages 15 through 19.¹¹

Overall, child death rates have decreased substantially over the past several decades (see Table HC 1.2.A).¹² In 1996, death rates per 100,000 were 38.3 for 1- through 4-year-olds, 19.8 for 5- through 9-year-olds, 24.3 for 10- through 14-year-olds, and 79.2 for 15- through 19-year-olds.¹³

Differences by Age. The most dramatic declines in death rates occurred among children under age 15, with decreases of 65 percent among children ages 1 to 4, 60 percent among children ages 5 to 9, and a 45 percent decrease among children ages 10 through 14 since 1960 (see Figure HC 1.2.A). Most of the decline in the death rate for these groups occurred between 1960 and 1990. In contrast, death rates for youth ages 15 through 19 have decreased by only 14 percent since 1960. Moreover, unlike the fairly steady declines among the younger age groups, the adolescent death rate has had a variable pattern over the last thirty years (see Figure HC 1.2.A).

Differences by Race and Hispanic Origin. Multi-year data from the National Center for Health Statistics are used to examine the differences in the death rate of children and youth for several racial and ethnic groups across three time periods spanning from 1989 through 1995 (see Table HC 1.2.B). For children ages 1 to 14, and youth ages 15 to 24, blacks have the highest death rate, followed by Native Americans, Hispanics, and whites. Asian children and youth consistently have the lowest death rates.

The death rate for children ages 1 to 14 decreased modestly for all racial and ethnic groups except Native Americans over the three periods. Trends in the death rate for youth ages 15 to 24 were more mixed, decreasing only for whites and Native Americans between the first two periods, and increasing for blacks, Hispanics, and Asians; however, the death rate for the latter three groups declined between 1992-1993 and 1994-1995, while the rates for whites and Native Americans remained constant. Overall, the youth death rate for whites and Native Americans experienced the largest decreases over the three periods.

Differences by Race for Younger Children. Data for earlier decades are available only for black and white children (see Table HC 1.2.A). These data show substantial differences between white and black children since at least 1970 for children ages 1 through 4, 5 through 9, and 10 through 14. By 1996, the death rate for black children ages 10 through 14 was 58 percent higher than the rate for white children in that age group, 68 percent higher for children ages 5 through 9, and twice as high for children ages 1 through 4.

Differences by Race for Adolescents. The black/white disparity among adolescents ages 15 through 19 was substantial in 1970, but had declined by 1980 to the point where black youth registered lower death rates than white youth (see Figure HC 1.2.B). This reversal was short-lived, however. Black death rates surged from a low of 85.2 per 100,000 in 1985 to 145.0 per 100,000 by 1994, while white death rates remained fairly stable. Much of this increase in black teen deaths reflected a substantial increase in black

⁹Injury-related deaths include deaths from motor vehicle crashes, fires and burns, drowning, suffocation, and accidents caused by firearms and other explosive materials, as well as homicides, suicides, and other external causes of death. See Fingerhut, L.A., Annett J.L., Baker, S.P., Kochanek, K.D. and McLoughlin, E. 1996. "Injury Mortality Among Children and Teenagers in the United States, 1993." *Injury Prevention* 2: 93-94.

¹⁰Anderson, R.N., Kochanek, K.D., and Murphy, S.L. "Report of Final Mortality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1997.

¹¹Discussion and data regarding motor vehicle crashes, the largest category of accident-related death for 15- to 19-year-olds, follows in the next section [HC 1.3].

¹²Health Resources and Services Administration. *Child Health USA* =95. DHHS Pub. No. HRSA-M-DSEA-96-5. Washington, D.C.: Public Health Service, 1996.

¹³Data for 1996 are preliminary.

teen male homicide rates, which are reviewed in Section HC 1.4 of this report. Since 1994, black death rates for youth ages 15 through 19 have been declining.

Differences by Gender. Male child death rates are higher than female rates for all age groups, but the differences are far more pronounced for the older age groups, for whom injury-related deaths disproportionately affect males (see Table HC 1.2.A).¹⁴

Table HC 1.2.A

Child and youth death rates (death rates per 100,000 population in each age group) in the United States, by age group, gender, and race: selected years, 1960-1996^a

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^a
Ages 1-4													
All children	109.1	95.9	84.5	69.9	63.9	51.8	46.8	47.4	43.6	44.8	42.9	40.6	38.3
Gender													
Male	119.5	104.3	93.2	76.7	72.6	58.5	52.4	52.0	48.0	49.5	47.3	44.8	42.4
Female	98.4	87.1	75.4	62.7	54.7	44.8	41.0	42.7	39.0	39.9	38.2	36.2	34.0
Race													
White	95.2	83.2	75.1	63.3	57.9	46.6	41.1	41.7	38.1	38.3	36.5	35.1	32.9
Black	—	—	140.0	106.2	97.6	80.7	76.8	79.7	73.2	79.1	77.2	70.3	67.1
Ages 5-9													
All children	49.0	43.9	42.1	35.2	30.4	25.0	22.2	21.5	20.4	21.1	19.9	19.7	19.8
Gender													
Male	56.3	50.8	49.7	41.4	35.0	28.5	25.6	24.5	23.7	23.2	22.6	22.5	22.6
Female	41.5	36.8	34.2	28.6	25.6	21.4	18.5	18.4	16.8	19.0	17.0	16.7	16.9
Race													
White	46.2	40.8	39.9	33.0	28.4	22.9	20.3	19.8	18.3	19.0	17.6	17.7	18.0
Black	—	—	56.4	47.4	41.7	36.2	32.3	32.0	32.1	32.9	31.8	30.2	30.3
Ages 10-14													
All children	44.0	40.5	40.6	35.3	30.8	28.0	26.0	25.8	24.6	25.6	25.2	25.5	24.3
Gender													
Male	55.0	50.9	51.3	44.9	38.3	35.0	31.6	32.9	30.7	31.7	31.2	31.0	29.3
Female	32.6	29.7	29.5	25.3	22.9	20.6	20.2	18.2	18.2	19.2	18.8	19.6	19.0
Race													
White	41.4	38.6	38.4	33.7	29.8	27.0	24.3	24.2	22.8	23.7	23.0	23.6	22.3
Black	—	—	54.6	44.3	36.6	34.8	36.6	36.4	35.3	37.2	37.9	36.8	35.3
Ages 15-19													
All children	92.2	95.3	110.3	100.2	97.9	80.5	87.9	89.0	84.3	86.9	86.8	83.5	79.2
Gender													
Male	130.1	136.0	157.8	145.4	141.4	113.4	127.2	128.6	122.4	126.0	126.6	119.5	112.0
Female	54.0	53.9	61.7	53.8	53.1	46.2	46.4	47.2	44.0	45.6	44.8	45.7	44.2
Race													
White	87.9	90.9	103.1	98.0	99.1	80.2	81.4	80.5	75.6	77.0	76.8	75.6	72.3
Black	—	—	158.0	114.4	92.3	85.2	127.7	141.2	135.5	143.6	145.0	130.2	120.1

^aData for 1996 are preliminary.

Sources: Anderson, R.N., Kochanek, K.D., and Murphy, S.L. "Report of Final Mortality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished data provided by the Statistical Resources Branch, National Center for Health Statistics.

¹⁴Sections HC 1.3 through HC 1.5 further highlight the differences in death rates between males and females ages 15-19 for violent and injury-related deaths.

Table HC 1.2.B

Child and youth death rates (per 100,000 population in each age group) in the United States, by age group, gender, race and Hispanic origin: 1989-1995

	Combined Years 1989-1991			Combined Years 1992-1993			Combined Years 1994-1995		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ages 1-14									
All races	31.4	36.2	26.3	29.3	33.7	24.6	28.3	32.6	23.8
White ^a	28.4	32.8	23.8	26.1	30.3	21.7	25.1	28.9	21.0
Black ^a	48.3	56.1	40.3	47.1	53.4	40.7	46.1	53.1	38.8
Asian ^b	22.7	25.3	20.0	20.3	23.1	17.4	19.5	22.5	16.4
American Indian ^c	37.3	45.1	29.2	38.9	47.0	30.6	39.5	44.2	34.6
Hispanic origin ^d	30.2	34.7	25.5	28.4	32.4	24.2	26.4	30.8	21.8
Ages 15-24									
All races	99.1	146.1	50.0	97.0	144.0	47.9	96.0	141.4	48.1
White ^a	89.3	129.5	47.0	84.2	122.3	44.1	84.2	121.7	44.2
Black ^a	161.9	254.9	69.8	174.8	279.5	70.6	166.8	262.3	71.1
Asian ^b	50.1	70.8	28.1	56.1	80.1	31.1	55.8	78.9	32.0
American Indian ^c	142.0	208.3	71.1	129.4	184.2	71.4	129.1	191.4	63.6
Hispanic origin ^d	103.3	156.5	40.9	107.5	167.3	40.2	101.6	154.4	39.9

^aIncludes persons of Hispanic origin.

^bAsian and Pacific Islander. Includes persons of Hispanic origin.

^cAmerican Indian or Alaskan Native. Includes persons of Hispanic origin.

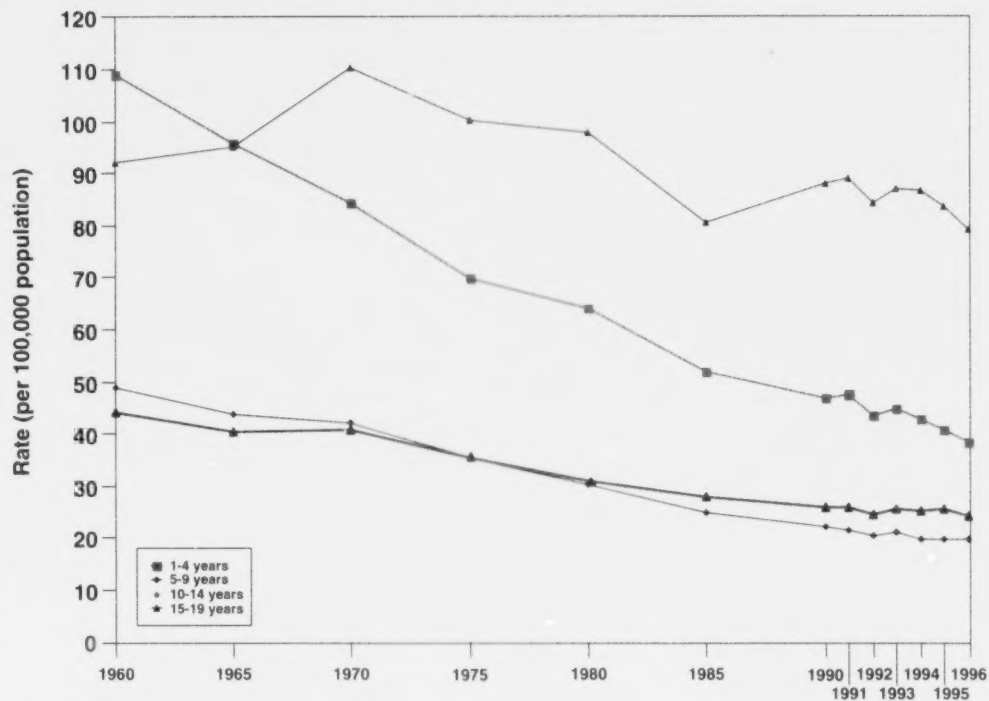
^dPersons of Hispanic origin may be of any race. Death figures for Hispanic persons in 1989 are based on data from 44 states and the District of Columbia that reported Hispanic origin on the death certificate, 47 states and the District of Columbia in 1990, 48 states and the District of Columbia in 1991 and 1992, and 49 states and the District of Columbia in 1993-1995.

Note: Death rates reported for white and black persons are based on highly consistent information. However, persons identified as American Indian, Asian, or Hispanic origin in the data from the Census Bureau (denominator of death rates) are sometimes misreported as white or non-Hispanic on the death certificate (numerator), resulting in underestimates of about 22-30 percent for death rates of American Indians, about 12 percent for death rates of Asians, and about 7 percent for persons of Hispanic origin. (National Center for Health Statistics, *Health, United States, 1993*, Table 33; Sorlie, P.D., Rogot E., and Johnson, N.J. 1992. "Validity of Demographic Characteristics on the Death Certificate." *Epidemiology* 3(2): 181-184.)

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from national population estimates for race groups; Also, data computed by Infant and Child Health Studies Branch, National Center for Health Statistics, from Mortality Data compiled by Division of Vital Statistics.

Figure HC 1.2.A

Child and youth death rates (per 100,000 population in each age group) in the United States, by age group: selected years, 1960-1996^a

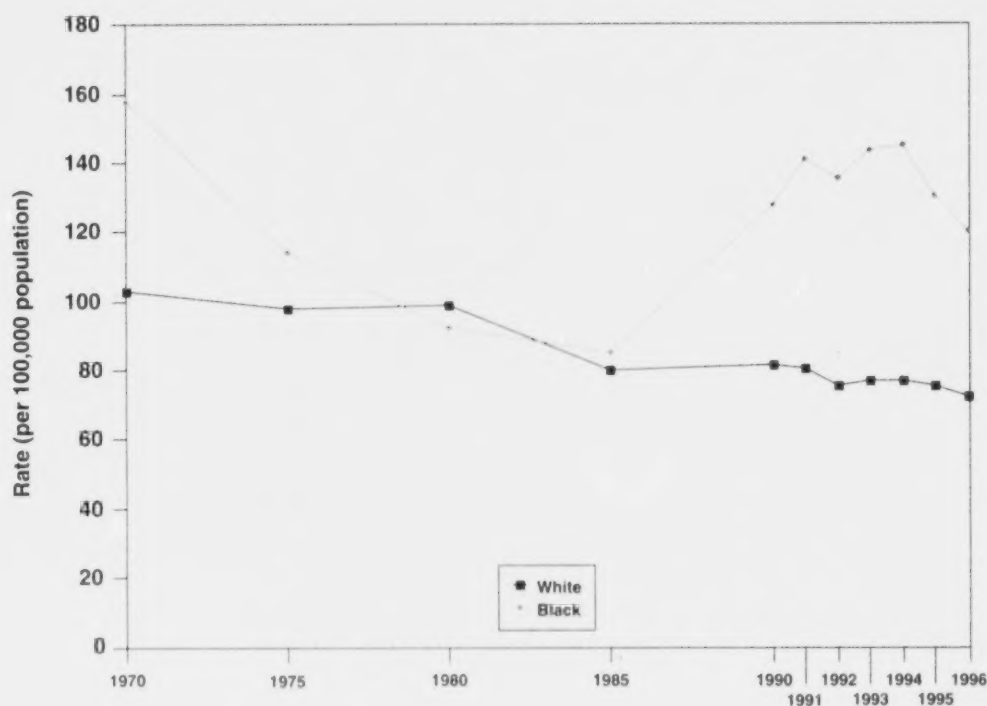


^aData for 1996 are preliminary.

Sources: Anderson, R.N., Kochanek, K.D., and Murphy, S.L. "Report of Final Mortality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished data provided by the Statistical Resources Branch, National Center for Health Statistics.

Figure HC 1.2.B

Youth death rates (per 100,000 population in age group) in the United States for ages 15 through 19, by race: selected years, 1970-1996^a



^aData for 1996 are preliminary.

Sources: Anderson, R.N., Kochanek, K.D., and Murphy, S.L. "Report of Final Mortality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished data provided by the Statistical Resources Branch, National Center for Health Statistics.

HC 1.3

YOUTH MOTOR VEHICLE CRASH DEATHS

Motor vehicle crashes are among the leading causes of injury-related deaths¹⁵ for 15- to 19-year-olds, accounting for 43 percent of all teenage injury deaths in 1995;¹⁶ however, as a fraction of all violent deaths to teens, motor vehicle crashes have declined. Preliminary data for 1996 show that motor vehicle crashes claimed 28.9 lives per 100,000 youth ages 15 through 19, compared with 43.6 per 100,000 youth in 1970 (see Figure HC 1.3).¹⁷ The rate of motor vehicle crash deaths among youth has been relatively constant since 1992.

Differences by Gender and Race. The decrease in the rate of youth motor vehicle deaths between 1970 and 1996 has been greatest among males ages 15 through 19, falling from 67.1 to 39.9 deaths per 100,000 white males, and from 43.4 to 29.1 deaths per 100,000 black males (see Table HC 1.3). Similar decreases in the rates of motor vehicle crash deaths have not been seen among females ages 15 through 19. Among this group of white females, the rate of deaths due to motor vehicle crashes has fluctuated between 20 and 26 per 100,000, and by 1996 was 21.3 deaths per 100,000, compared with 24.4 deaths per 100,000 in 1970. Black females have had lower motor vehicle crash death rates than whites. After a drop from 11.1 deaths per 100,000 in 1970 to 6.7 deaths per 100,000 in 1980, rates have generally increased for this group, to 12.5 deaths per 100,000 in 1996.

Differences by Age. Among youth ages 10 through 14, motor vehicle death rates are quite low in comparison to older youth and have dropped from 9.6 to 5.8 per 100,000 between 1970 and 1996. This decline was evident for both white and black males and females, with most of the decline occurring before 1990.

Table HC 1.3

Youth motor vehicle crash deaths (rate per 100,000) in the United States, by age, gender, and race: selected years, 1970-1996^a

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^b
All youth											
Ages 10-14	9.6	8.4	8.1	7.4	6.4	6.1	5.5	5.9	6.0	6.1	5.8
Ages 15-19	43.6	38.4	43.0	33.5	33.1	31.2	28.2	28.6	29.3	28.6	28.9
White males											
Ages 10-14	12.6	10.9	10.9	9.8	7.7	7.8	7.0	7.1	7.5	7.2	7.0
Ages 15-19	67.1	61.7	69.1	51.3	49.3	44.5	39.6	41.6	41.7	38.9	39.9
White females											
Ages 10-14	6.6	5.8	5.7	5.6	5.3	4.4	4.1	4.4	4.8	5.0	4.9
Ages 15-19	24.4	20.6	25.6	22.6	22.2	23.0	21.0	20.2	21.3	22.1	21.3
Black males											
Ages 10-14	11.9	9.6	7.9	8.9	7.9	8.8	7.8	8.3	7.6	7.7	7.4
Ages 15-19	43.4	24.6	24.4	22.1	28.7	29.5	26.2	26.7	29.0	29.0	29.1
Black females											
Ages 10-14	6.4	4.2	4.0	3.0	3.8	3.3	3.6	4.8	4.8	4.2	2.9
Ages 15-19	11.1	7.1	6.7	7.5	9.7	9.0	9.1	8.2	10.4	10.7	12.5

^aData for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics.

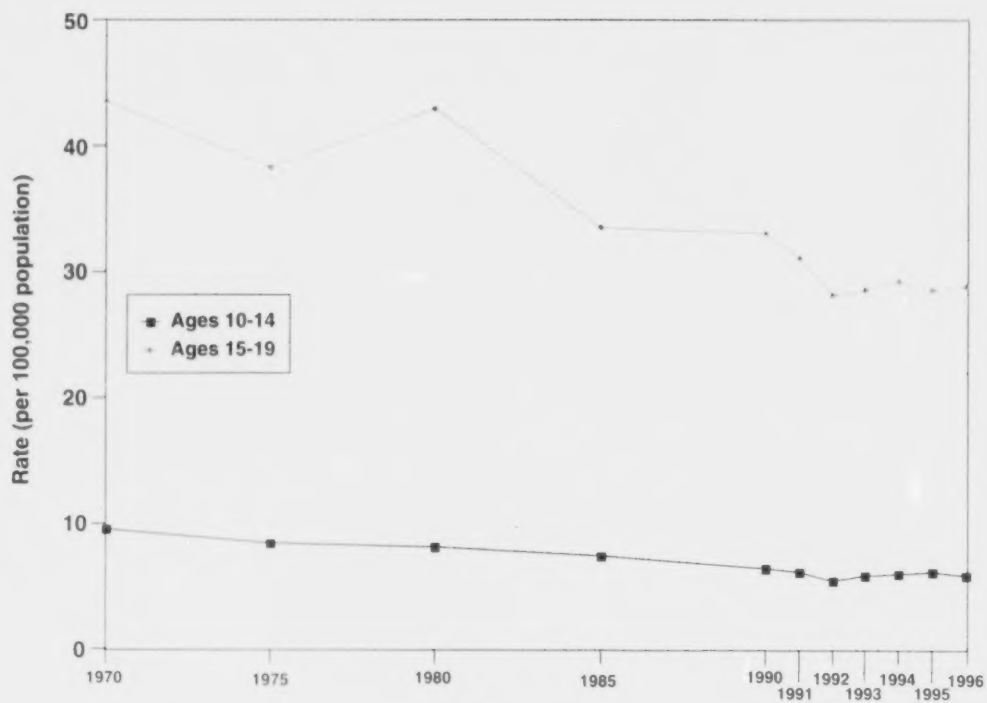
¹⁵Injury-related deaths include deaths from motor vehicle crashes, fires and burns, drowning, suffocation, and accidents caused by firearms and other explosive materials, as well as homicides, suicides, and other external causes of death.

¹⁶National Center for Health Statistics. 1995 Detailed Mortality File. Unpublished data.

¹⁷Data for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

Figure HC 1.3

Youth motor vehicle crash deaths (rate per 100,000) in the United States, by age: selected years, 1970-1996a



aData for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics.

HC 1.4

YOUTH HOMICIDES

After more than a decade of sharp increases, the youth homicide rate decreased between 1994 and 1996. The rate of death from homicide for youth ages 15 through 19 more than doubled between 1970 and 1994, increasing from 8.1 per 100,000 in 1970 to 20.3 per 100,000 in 1994 (see Table HC 1.4.A). Virtually all of this increase occurred after 1985 (see Figure HC 1.4.A). Since 1994, rates have decreased to 18.2 deaths per 100,000 in 1995 and 15.5 deaths per 100,000 in 1996.¹⁸

Male Youth Homicide Rates by Race. The trend in the death rate due to homicide for black males largely dominates the rate of youth homicides for ages 15 through 19. The rate of death from homicide for this age group of black males increased dramatically from 46.7 per 100,000 in 1985 to 140.7 per 100,000 in 1993, a rate more than nine times that for white males of the same age (see Figure HC 1.4.B). The homicide rate for black males ages 15 through 19 actually declined nearly 30 percent from 1970 to 1985, but rose again after 1985. Since 1993, this rate has decreased nearly 30 percent again, falling to 100.4 deaths per 100,000 by 1996.

While the homicide rate for white males of the same age group (15 through 19) is substantially less than that of black males, similar fluctuations in this rate can be seen over time with the largest increases occurring between 1985 and the early 1990s, and decreases in recent years. Overall, this rate has more than doubled from 5.2 deaths per 100,000 in 1970 to 12.1 deaths per 100,000 in 1996 due to homicide.

Female Youth Homicide Rates by Race. Homicide rates for females of both races ages 15 through 19 are considerably lower than among males in this age group. For example, the rate for black females was 13.3 per 100,000 in 1996, 87 percent lower than the rate for black males. The gender disparity in homicide rates is also large for whites, although it is not as great as that between black males and females. In 1996, the homicide rate for white females ages 15 through 19 was 2.8 deaths per 100,000, less than a quarter of that for white males. As is the case for males, the youth homicide rate for black females is higher than the rate for white females nearly five times higher in 1996.

Homicide Rates for Younger Youth. The homicide rate for youth ages 10 through 14 was 1.8 per 100,000 in 1996 — substantially lower than the rate for older youth. The disparity between males and females is not as pronounced in this age group as the difference for older youth ages 15 through 19. However, the homicide rates for both white and black males ages 10 through 14 have been approximately twice that of females in recent years.

Homicides Involving Firearms. Firearms have been involved in the majority of youth homicides since 1980 (see Figure HC 1.4.C). Deaths to youth ages 15 through 19 involving firearms accounted for 66 percent of the total deaths due to homicide in 1980 (7.0 firearm deaths per 100,000 out of a total of 10.6 deaths per 100,000 due to homicide). The percentage of firearm-related homicides increased to 85 percent by 1995 for this same age group. Homicides due to firearms are more likely among black youth than among white youth, and most particularly among black males ages 15 through 19 (see Table HC 1.4.B). In 1995, 92 percent of homicides among older male black youth (ages 15 through 19) involved a firearm, compared with 84 percent among older white male youth. The rate of death due to firearms among black males ages 15 through 19 has decreased since 1993, serving as one explanation for the decline in the overall homicide rate among this group. Homicides among female youth involve a firearm less often, although firearms are still the means of the majority of female homicides.

¹⁸Data for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

Table HC 1.4.A

Youth homicides^a (rate per 100,000) in the United States, by age, gender, and race: selected years, 1970-1996^b

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^b
All youth											
Ages 10-14	1.2	1.2	1.4	1.5	2.1	2.2	2.4	2.5	2.2	2.1	1.8
Ages 15-19	8.1	9.6	10.6	8.6	17.0	19.6	19.3	20.7	20.3	18.2	15.5
White males											
Ages 10-14	0.6	1.0	1.1	1.4	1.7	1.8	2.0	1.9	1.8	2.0	1.5
Ages 15-19	5.2	8.1	10.9	7.2	12.5	14.4	15.2	15.2	15.4	14.7	12.1
White females											
Ages 10-14	0.6	0.8	1.1	0.9	0.9	0.9	1.0	1.2	0.9	1.0	0.9
Ages 15-19	2.1	3.2	3.9	2.7	3.6	3.6	3.6	3.6	3.4	3.9	2.8
Black males											
Ages 10-14	6.8	4.1	3.9	4.2	8.1	9.1	9.6	10.5	9.1	8.2	6.3
Ages 15-19	65.2	51.4	48.8	46.7	115.7	134.6	128.5	140.7	135.8	110.5	100.4
Black females											
Ages 10-14	2.3	2.3	2.4	1.7	4.8	3.8	5.1	5.2	4.6	3.0	3.3
Ages 15-19	10.6	15.3	11.0	10.4	15.6	15.6	14.2	18.4	15.1	16.4	13.3

^aHomicide includes death by legal intervention.

^bData for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics.

Table HC 1.4.B

Youth homicides due to firearms^a (rate per 100,000) in the United States, by age, gender, and race: selected years, 1980-1995

	1980	1985	1990	1991	1992	1993	1994	1995
All youth								
Ages 10-14	0.8	0.8	1.5	1.6	1.9	1.9	1.7	1.6
Ages 15-19	7.0	5.7	13.8	16.4	16.7	17.8	17.7	15.4
White males								
Ages 10-14	0.7	0.9	1.3	1.4	1.6	1.5	1.5	1.6
Ages 15-19	7.2	4.9	9.4	11.7	12.9	12.6	12.9	12.3
White females								
Ages 10-14	0.5	0.4	0.4	0.5	0.6	0.6	0.5	0.5
Ages 15-19	1.7	1.2	2.0	2.1	2.3	2.2	2.4	2.2
Black males								
Ages 10-14	3.2	3.0	6.9	8.2	8.4	9.8	7.7	7.4
Ages 15-19	38.4	36.6	104.4	122.6	118.8	130.1	126.6	101.7
Black females								
Ages 10-14	1.0	0.6	3.1	2.7	3.4	3.3	3.3	2.0
Ages 15-19	6.2	5.0	10.4	11.2	10.5	14.3	11.1	12.3

^aIncludes assault by handguns and all other and unspecified firearms.

Note: Calculations by Child Trends, Inc., to combine rates of assault by handguns and rates of assault by all other and unspecified firearms may affect overall rates due to previous rounding.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics.

Figure HC 1.4.A

Youth homicides^a (rate per 100,000) in the United States, by age: selected years, 1970-1996^b



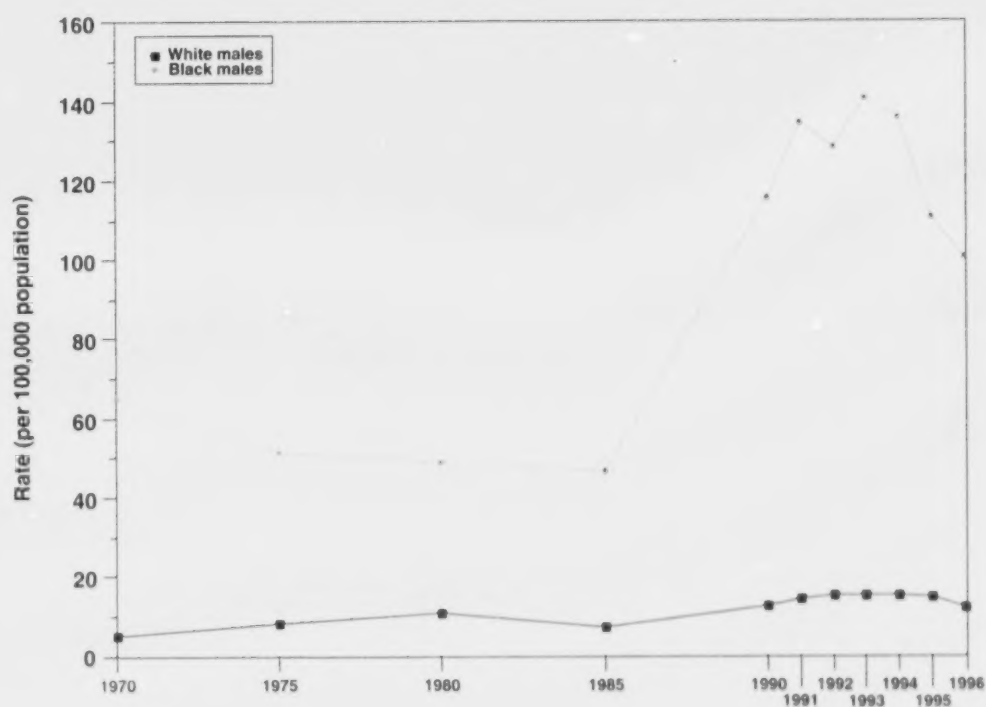
^aHomicide includes death by legal intervention.

^bData for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics.

Figure HC 1.4.B

Youth homicides^a for males ages 15 through 19 (rate per 100,000) in the United States, by race: selected years, 1970-1996^b



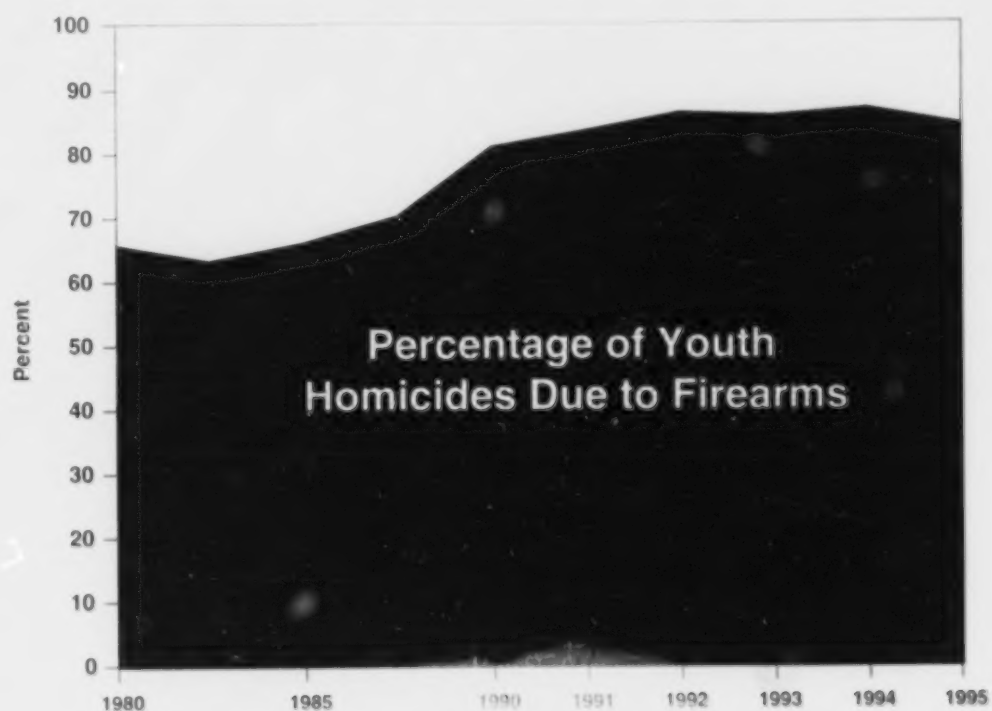
^aHomicide includes death by legal intervention.

^bData for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics.

Figure HC 1.4.C

Percentage of youth homicides^a due to firearms^b in the United States, for youth ages 15 through 19: selected years, 1980-1995



^aHomicide includes death by legal intervention.

^bIncludes assault by handguns and all other and unspecified firearms.

Source: National Center for Health Statistics, unpublished work tables prepared in the Mortality Statistics Branch, Division of Vital Statistics.

HC 1.5

YOUTH SUICIDES

Suicide, like homicide, has come to play a proportionately larger role in teen deaths over the past several decades. Between 1970 and 1990, the suicide rate for youth ages 15 through 19 nearly doubled, from 5.9 to 11.1 per 100,000 (see Figure HC 1.5). Since 1990, the overall suicide rate has stabilized at approximately 11 deaths per 100,000 youth ages 15 through 19, although preliminary data for 1996 show a slightly lower rate of 9.7 deaths per 100,000.¹⁹

Differences by Gender. Male teens are more likely than females to commit suicide (see Table HC 1.5). The suicide rate for white males ages 15 through 19 was 16.4 per 100,000 in 1996, more than four times the rate of 3.6 per 100,000 for white females. Among blacks, males have a rate at least six times that of females for youth ages 15 through 19 in 1996 (11.4 and 1.8 per 100,000 respectively), although rates for both sexes have decreased in recent years.

Differences by Race. White males ages 15 through 19 have long had a higher suicide rate than their black male peers (see Table HC 1.5). In 1970, white males ages 15 through 19 were twice as likely as black males to commit suicide (9.4 versus 4.7 per 100,000). However, the gap between white and black male suicide rates has narrowed in recent years, with suicide rates of 16.4 and 11.4 per 100,000, according to 1996 preliminary data for white and black males, respectively.²⁰ Among females ages 15 through 19, whites and blacks were equally likely to commit suicide in 1970, with rates of 2.9 per 100,000. By 1975, white female suicide rates were twice that of their black peers ages 15 through 19. White female suicide rates have remained higher than black female rates since that time.

Suicide Rates for Younger Youth. While considerably lower, suicide rates for youth ages 10 through 14 have followed trends similar to those among older youth, with males having higher rates of suicide than females and whites having higher suicide rates than blacks (see Table HC 1.5). In this age group, suicide is infrequent for both sexes and races, making gender or racial differences small as well.

¹⁹Data for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

²⁰The race disparity in the suicide rate between all white youth ages 10 through 19 and all black youth ages 10 through 19 narrowed substantially between 1980 and 1995, largely due to the increase of suicide among black youth. In 1980, white youth (ages 10-19) had a suicide rate that was 157 percent greater than that of their black peers but by 1995, the rate among whites was 42 percent greater than the rate among blacks. [Data not shown here but can be found in Centers for Disease Control and Prevention. March 20, 1998. "Suicide Among Black Youths—United States, 1980-1995." *Morbidity and Mortality Weekly Report* 47(10).]

Table HC 1.5

Youth suicides (rate per 100,000) in the United States, by age, gender, and race: selected years, 1970-1996^a

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^a
All youth											
Ages 10-14	0.6	0.8	0.8	1.6	1.5	1.5	1.7	1.7	1.7	1.7	1.6
Ages 15-19	5.9	7.5	8.5	9.9	11.1	11.0	10.8	10.9	11.1	10.5	9.7
White males											
Ages 10-14	1.1	1.4	1.4	2.5	2.3	2.4	2.6	2.4	2.5	2.8	2.3
Ages 15-19	9.4	12.9	15.0	17.1	19.3	19.1	18.4	18.5	18.7	18.4	16.4
White females											
Ages 10-14	0.3	0.4	0.3	0.9	0.9	0.8	1.1	1.0	1.0	0.9	0.9
Ages 15-19	2.9	3.1	3.3	4.1	4.0	4.2	3.7	4.2	3.5	3.3	3.6
Black males											
Ages 10-14	0.3	0.2	0.5	*	1.6	2.0	2.0	2.3	2.1	1.6	1.8
Ages 15-19	4.7	6.1	5.6	8.2	11.5	12.2	14.8	14.4	16.6	13.8	11.4
Black females											
Ages 10-14	0.4	0.3	0.1	*	*	*	*	*	*	*	*
Ages 15-19	2.9	1.5	1.6	1.5	1.9	*	1.9	*	2.4	2.3	1.8

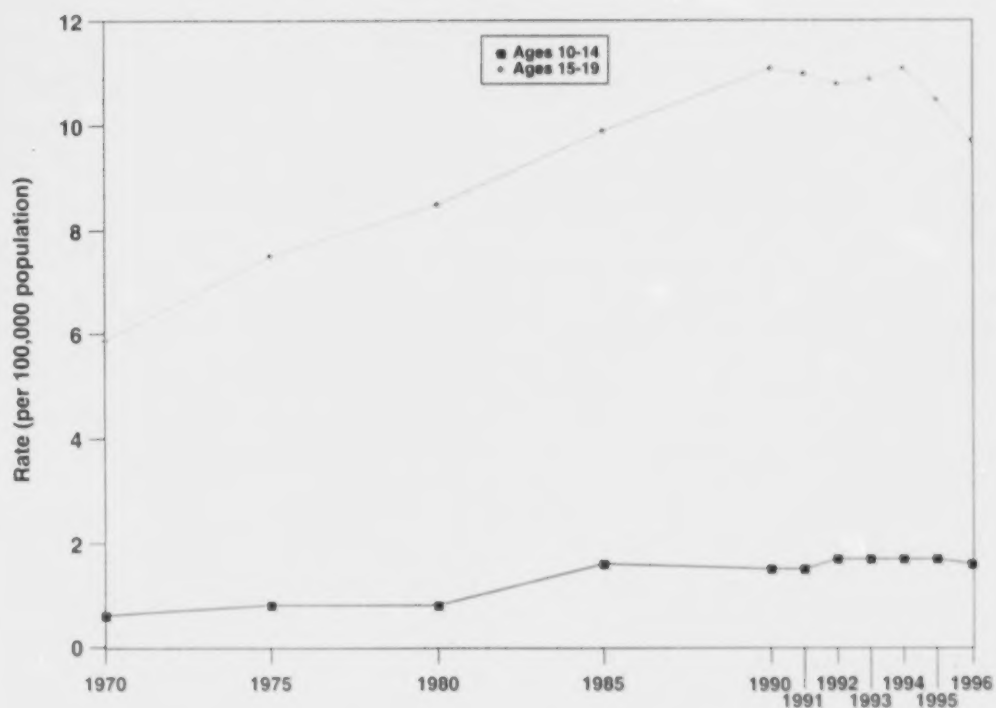
^aData for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

* = Not calculated because of unreliability due to infrequency of the event.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics.

Figure HC 1.5

Youth suicides (rate per 100,000) in the United States, by age: selected years, 1970-1996^a



^aData for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics.

HC 1.6

FIREARM-RELATED DEATHS

Death due to injury by firearms includes deaths due to homicide, suicide, legal intervention, unintentional death by firearms, and firearm-related deaths of undetermined intent. Taken together, suicide and homicide have accounted for the vast majority of firearm-related deaths over the past thirty years—as high as 94 percent in 1994.²¹ Overall, the trends in the rate of deaths due to injury by firearms have most closely mirrored that of firearm-related homicide.

Firearm-related death is a growing public health concern for all ages as it was a major contributor to death in 1994 and the fourth leading cause of years of potential life lost before age 65;²² however, the rate of firearm-related death among youth ages 15 through 19 is of particular concern as homicide rates for this group rose dramatically in the late 1980s and early 1990s, particularly among black males. In addition, the rate of unintentional death due to firearms has historically been highest among older youth ages 15 through 19. Overall, the rate of death due to injury by firearms doubled for youth ages 15 through 19 between 1980 and 1994, from 14.7 deaths to 28.2 deaths per 100,000. Since 1994, the firearm-related death rate has declined, and in 1996 was at 21.0 deaths per 100,000 (see Table HC 1.6). The firearm-related death rate for youth ages 10 through 14 is considerably lower than the rate for older youth. In 1996, the rate for youth ages 10 through 14 was 2.7 per 100,000, compared with 21.0 per 100,000 for youth ages 15 through 19.²³

Differences by Race. Among younger adolescents ages 10 through 14, and among females ages 15 through 19, the rate of death due to injury by firearms ranges from two to three times higher for blacks than for whites. The rate of firearm-related death is most striking for black males ages 15 through 19. At 108.1 deaths per 100,000 in 1996, the rate for black males is more than four and one half times the rate of their white peers (see Figure HC 1.6). This rate is largely due to the high rate of deaths due to homicide among black males in this age group.²⁴

Differences by Gender. Among blacks and whites in both age groups, firearm-related deaths are more prevalent among males; for example, the death rate for black females ages 15 through 19 was 11.7 per 100,000 in 1996, while the rate for their male peers was more than nine times greater (108.1 per 100,000). Among whites ages 15 through 19, females experience firearm-related deaths at approximately one-sixth the rate of males.

²¹ Ikeda, R.M., Gorwitz, R., James, S.P., Powell, K.E., and Mercy, J.A. Fatal Firearm Injuries in the United States, 1962-1994. *Violence Surveillance Summary Series* (5). Atlanta: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 1997.

²² Ibid.

²³ Data for 1996 are preliminary.

²⁴ Refer to section HC 1.4 for further discussion of youth homicide.

Table HC 1.6

Youth deaths due to injury by firearms (rate per 100,000) in the United States, by age, gender and race: selected years, 1980-1996^a

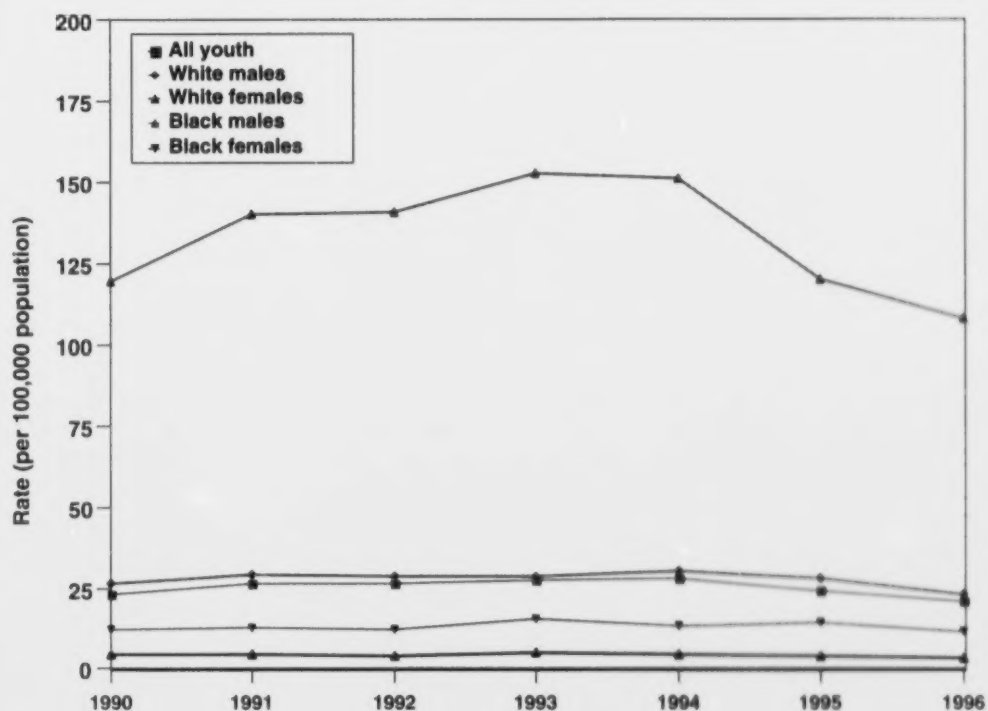
	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^a
All youth									
Ages 10-14	2.4	2.8	3.3	3.5	3.7	3.8	3.5	3.4	2.7
Ages 15-19	14.7	13.3	23.3	26.4	26.2	27.8	28.2	24.5	21.0
White males									
Ages 10-14	3.6	4.5	4.2	4.6	4.5	4.4	4.3	4.4	3.6
Ages 15-19	20.9	18.4	26.2	29.1	28.8	28.8	30.2	27.9	22.9
White females									
Ages 10-14	1.0	1.0	1.0	1.0	1.3	1.2	1.2	1.2	1.0
Ages 15-19	4.1	3.5	4.6	4.5	4.3	4.9	4.7	4.2	3.7
Black males									
Ages 10-14	4.7	4.8	10.2	11.5	11.6	13.4	11.2	10.1	7.9
Ages 15-19	46.7	46.5	119.7	140.5	140.9	153.1	151.1	120.3	108.1
Black females									
Ages 10-14	1.5	0.7	3.7	3.0	3.9	3.9	3.5	2.5	2.5
Ages 15-19	7.5	6.1	12.1	12.7	12.4	15.8	13.3	14.2	11.7

^aData for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics.

Figure HC 1.6

Deaths due to injury by firearms (rate per 100,000) for youth ages 15 through 19 in the United States, by gender and race: 1990-1996^a



^aData for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics.

HC 2.1

HEALTHY BIRTHS

A healthy birth is defined here as a birth with the following characteristics: a five-minute Apgar^a score of 9 or more out of 10, weight at birth of at least 2,500 grams (5lb. 8oz.), a gestational age of at least 37 weeks, and maternal receipt of prenatal care within the first trimester.

Increasing Percentages of Healthy Births. Table HC 2.1 reports the percentage of all births qualifying as healthy births by race and ethnic group, and by the mother's marital status and educational background. The table shows an increase in the percentage of all healthy births between 1985 and 1995, as well as increases for each population subgroup presented. The percentage of all births qualifying as healthy increased from 59.1 percent in 1985 to 66.6 percent in 1995.

Continued Disparities Across Population Subgroups. While healthy births are increasing for all the subgroups presented in Table HC 2.1, there are also persistent disparities across subgroups (see Figure HC 2.1).

- In 1995, 51.3 percent of births to black women were defined as healthy, compared with 56.3 percent of births to Hispanic women and 70.1 percent of births to white women.
- In 1995, 73.3 percent of births to married women were healthy, compared with 52.2 percent of births to single women.
- In 1995, 70.6 percent of births to women with at least a high school education were healthy, compared with 50.0 percent of births to women with less than a high school education.

Table HC 2.1

Percentage of all births in the United States defined as healthy,^a by mother's race and Hispanic origin,^b marital status,^c and educational attainment: selected years, 1985-1995

	1985	1991	1994	1995
Total	59.1	61.1	65.9	66.6
Race and Hispanic origin^b				
White	62.7	65.0	69.8	70.1
Black	41.5	43.3	49.7	51.3
Hispanic	48.6	49.8	55.4	56.3
Marital status				
Married	65.0	68.6	73.0	73.3
Single	37.9	43.1	50.6	52.2
Education				
High school or more	64.0	67.1	70.1	70.6
Less than high school	40.0	43.3	48.8	50.0

^aHealthy birth is defined as follows: 5-minute Apgar score of 9 or above, birth weight of at least 2,500 grams (5lb. 8oz.), gestational age of 37 weeks or more, and prenatal care in the first trimester.

^bEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

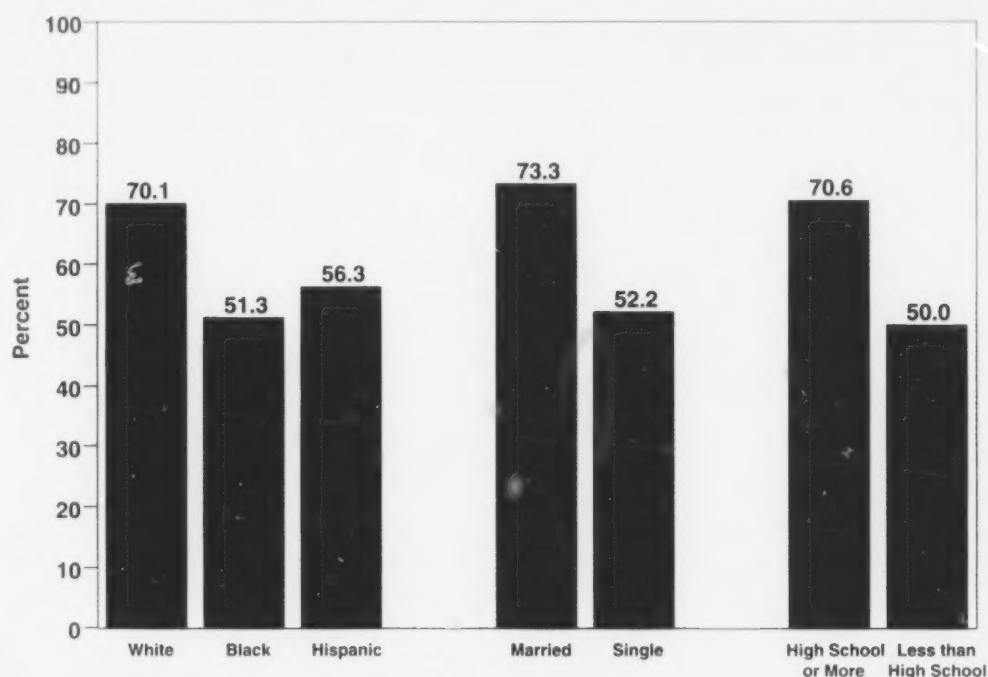
^cSingle status refers to women who have never been married, or are divorced or widowed.

Sources: 1985 and 1991 data from Morrison, D.R. "Healthy Birth Index." Final Report. Submitted to the Annie E. Casey Foundation, Kids Count Indicator Development Project. Washington, D.C.: Child Trends, Inc., 1994. Special tabulations for 1994 and 1995 birth data by Sally C. Curtin, National Center for Health Statistics.

^aThe Apgar score is a numerical expression of the physical condition of an infant shortly after delivery. The infant is rated 0, 1, or 2 on color, heart rate, reflex irritability, muscle tone, and breathing. The maximum score is 10, and a score of 4 or less indicates examination and treatment are warranted. As defined in Apgar, V., Holiday, D.A., James, L.S., Weisbroit, T.N., and Berrien, C. 1953. "Evaluation of the Newborn Infant-2nd Report." *Current Researches in Anesthesia and Analgesia* 32: 260-267.

Figure HC 2.1

Percentage of all births in the United States defined as healthy,^a by mother's race and Hispanic origin,^b marital status,^c and educational attainment: 1995



^aHealthy birth is defined as follows: 5-minute Apgar score of 9 or above, birth weight of at least 2,500 grams (5lb. 8oz.), gestational age of 37 weeks or more, and prenatal care in the first trimester.

^bEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

^cSingle status refers to women who have never been married, or are divorced or widowed.

Sources: 1985 and 1991 data from Morrison, D.R. "Healthy Birth Index." Final Report. Submitted to the Annie E. Casey Foundation, Kids Count Indicator Development Project. Washington, D.C.: Child Trends, Inc., 1994; Special tabulations for 1994 and 1995 birth data by Sally C. Curtin, National Center for Health Statistics.

HC 2.2

LOW BIRTH WEIGHT

Low birth-weight infants [babies born weighing less than 7,500 grams (5lb. 8oz.)] face an increased risk of physical and developmental complications and death.¹⁹ These babies account for nearly two-thirds of all neonatal deaths (deaths under 28 days of age) and are 21 times more likely to die during the first year than are heavier infants.²⁰

Although slight declines are seen in the 1980s, overall the percentage of all infants born at low birth weight has remained relatively constant since 1970, when 7.9 percent of infants were born at low birth weight, compared with 7.4 percent in 1996 (see Table HC 2.2).²¹

Differences by Race and Ethnicity. Low birth weight rates are consistently higher among black infants than among other races and Hispanics. The percentages of low birth-weight infants among whites, American Indians/Alaskan Natives, Asians/Pacific Islanders, and Hispanics have remained within one percentage point of each other and have mostly hovered around 6 to 7 percent over the last two decades. The percentage of low birth-weight black infants is nearly double that of other groups. Preliminary data for 1996 show a percentage of low birth-weight infants of 13 percent among blacks, and 6.3 percent among both whites and Hispanics.

Among Asians/Pacific Islanders and Hispanics, there are subgroup differences. Since 1970, Chinese women have consistently had the lowest percentage of low-weight births, and Filipino women have had the highest among Asians/Pacific Islander women. In 1995 (the latest year for which data are available), these percentages were 5.3 percent and 7.8 percent, respectively. Among Hispanics, Mexican-American women have generally had the lowest percentage of low birth-weight infants (ranging from 5.6 to 5.8 percent), and Puerto Rican women have had the highest (ranging from 8.7 to 9.4 percent).

Differences by Age. For women in all age groups, there was a decline in the percentage of low-weight births between 1970 and 1985. Since 1985, however, that percentage increased slightly across nearly all age groups. The following trends, illustrated in Table HC 2.2, are particularly noteworthy:

- Women under age 15 consistently have the highest rates of low-weight births of any age group (see Table HC 2.2). While the percentage of low-weight births to women under age 15 improved between 1970 and 1995, the trend has not been one of consistent improvement. Instead, the percentage of low-weight births to these very young women decreased considerably between 1970 and 1985 — from 16.6 percent to 12.9 percent — but then increased to 13.7 percent by 1994. Preliminary data for 1996 indicate that this percentage has now fallen to a new low of 12.7 percent (see Figure HC 2.2).
- For women in all other age groups, rates of low-weight births have generally stayed within 1.5 percentage points of their 1970 rate.
- Women between the ages of 25 and 29 consistently have the lowest rates of low-weight births.

¹⁹Disorders relating to short gestation and low birth weight (less than 5.5 lb.) were the second leading cause of death to infants in 1996, as reported in Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths, United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2): Hyattsville, Md.: National Center for Health Statistics, 1997.

²⁰MacDorman, M.F. and Atkinson, J.O. "Infant Mortality Statistics from the Linked Birth Infant Death Data Set—1995 Period Data." *Monthly Vital Statistics Report* 46 (6, Supp. 2): Hyattsville, Md.: National Center for Health Statistics, 1998.; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp.): Hyattsville, Md.: National Center for Health Statistics, 1997.

²¹Data for 1996 are preliminary.

Table HC 2.2

Percentage of all low birth-weight^a infants born in the United States by mother's race/ethnicity^b and by age: selected years, 1970-1996^c

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^e
Total	7.9	7.4	6.8	6.8	7.0	7.1	7.1	7.2	7.3	7.3	7.4
Race/ethnicity^b											
White^d	6.9	6.3	5.7	5.7	5.7	5.8	5.8	6.0	6.1	6.2	6.3
Black^d	13.9	13.2	12.7	12.7	13.3	13.6	13.3	13.3	13.2	13.1	13.0
American Indian/Alaskan Native^d	8.0	6.4	6.4	5.9	6.1	6.2	6.2	6.4	6.5	6.6	—
Asian/Pacific Islander^d	—	—	6.7	6.2	6.5	6.5	6.6	6.5	6.8	6.9	—
Chinese	6.7	5.3	5.2	5.0	4.7	5.1	5.0	4.9	4.8	5.3	—
Japanese	9.0	7.5	6.6	6.2	6.2	5.9	7.0	6.5	6.9	7.3	—
Filipino	10.0	8.1	7.4	7.0	7.3	7.3	7.4	7.0	7.8	7.8	—
Hawaiian and part Hawaiian	—	—	—	—	7.2	6.7	6.9	6.8	7.2	6.8	—
Other Asian or Pacific Islander	—	—	—	—	6.7	6.7	6.7	6.9	7.1	7.0	—
Hispanic origin^d	—	—	6.1	6.2	6.1	6.1	6.1	6.2	6.3	6.3	6.3
Mexican American	—	—	5.6	5.8	5.5	5.6	5.6	5.8	5.8	5.8	—
Puerto Rican	—	—	9.0	8.7	9.0	9.4	9.2	9.2	9.1	9.4	—
Cuban	—	—	5.6	6.0	5.7	5.6	6.1	6.2	6.3	6.5	—
Central and South American	—	—	5.8	5.7	5.8	5.9	5.8	5.9	6.0	6.2	—
Other and Unknown Hispanic	—	—	7.0	6.8	6.9	7.2	7.2	7.5	7.5	7.5	—
Age											
Under age 15	16.6	14.1	14.6	12.9	13.3	13.7	13.2	13.5	13.7	13.5	12.7
15-19 years	10.5	10.0	9.4	9.3	9.3	9.3	9.3	9.2	9.3	9.3	9.3
20-24 years	7.4	7.1	6.9	6.9	7.1	7.2	7.1	7.2	7.3	7.3	7.4
25-29 years	6.9	6.1	5.8	5.9	6.2	6.3	6.2	6.4	6.4	6.4	6.5
30-34 years	7.5	6.8	5.9	6.1	6.4	6.6	6.5	6.7	6.7	6.7	6.8
35-49 years	8.8	8.4	7.2	7.1	7.4	7.7	7.8	8.1	8.2	8.3	8.3

^aBefore 1979, low birth weight defined as infants weighing 2,500 grams (5lb. 8oz.) or less. From 1979 and beyond, low birth weight defined as infants weighing less than 2,500 grams (5lb. 8oz.).

^bBirth figures for Hispanic infants in 1980 are based on data from 22 states that reported Hispanic origin on the birth certificate, 23 states and the District of Columbia in 1985, 48 states and the District of Columbia in 1990, 49 states and the District of Columbia in 1992, and 50 states and the District of Columbia since 1993.

^cData for 1996 are preliminary.

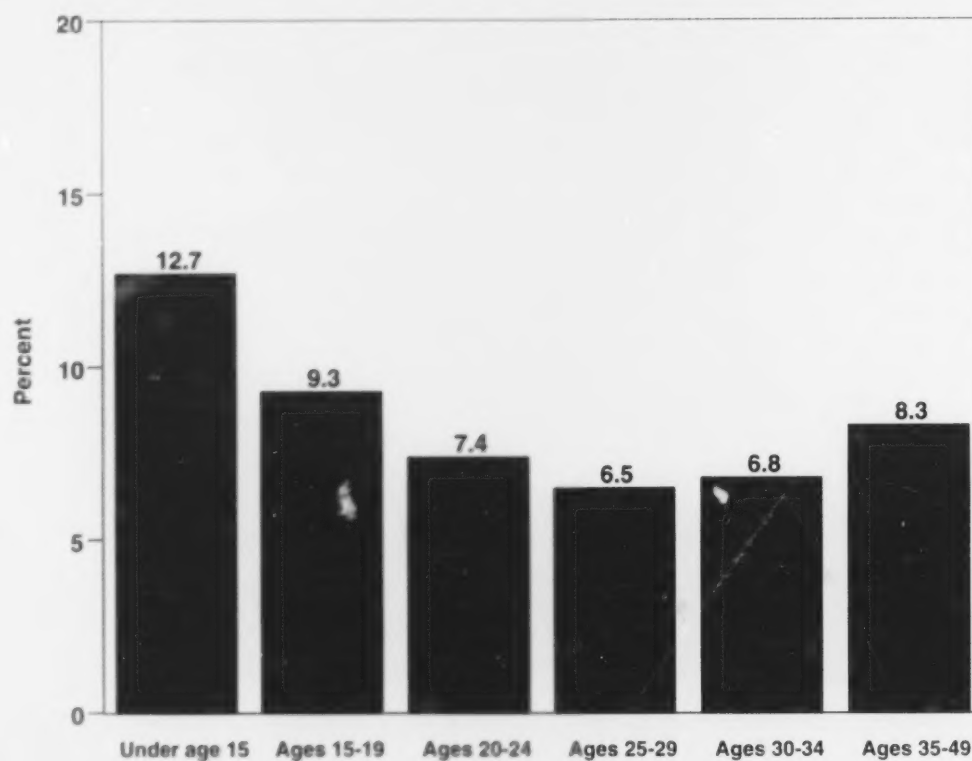
^dIncludes persons of Hispanic origin.

^ePersons of Hispanic origin may be of any race.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

Figure HC 2.2

Percentage of all low birth-weight^a infants born in the United States, by age of mother: 1996^b



^aLow birth weight defined as infants weighing less than 2,500 grams (5lb. 8oz.).

^bData for 1996 are preliminary.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

HC 2.3

VERY LOW BIRTH WEIGHT

Very low birth weight infants [babies born weighing less than 1,500 grams (3lb. 4oz.)] are at particularly high risk of severe physical and developmental complications and death. Advances in medical technology in recent years have made it possible for increasing numbers of very low birth weight infants to survive; however, these babies are 69 times more likely to die during the first year of life than babies weighing at least 1,500 grams.²⁹

The percentage of infants born at very low birth weight has remained relatively constant for the last 26 years (see Table HC 2.3). Between 1970 and 1989 (not shown), 1.2 percent of all infants were classified as very low birth weight.³⁰ The proportion then increased slightly to 1.3 percent, where it remained from 1990 to 1995, then to 1.4 percent in 1996.³¹

Differences by Race and Ethnicity. The percentage of babies born at very low birth weight varies by race and Hispanic origin (see Table HC 2.3). For white, American Indian/Alaskan Native, and Asian/Pacific Islander infants, the percentage of very low weight births has remained at or about one percent from 1970 through 1995. The same is true of Hispanic infants since 1980. For blacks, the percentage of very low birth weight babies increased from 2.4 percent in 1970 to 3 percent by 1991, where it has remained through 1996.

Differences by Age. A woman's age appears to be an important factor in the likelihood of very low birth weight, particularly at the youngest ages. The percentage of very low birth weight infants born to women under age 15 has increased since 1975, reaching its highest proportion in 1993 at 3.6 percent, and then decreasing slightly to 3.2 percent by 1995. The percentage of very low birth weight births among women ages 15 through 19 is lower than the proportion of such births to their younger counterparts, but remains slightly higher than the proportion observed for women age 20 and older.

²⁹MacDorman, M.E. and Atkinson, J.O. "Infant Mortality Statistics from the Linked Birth Infant Death Data Set-1995 Period Data." *Monthly Vital Statistics Report* 46 (6, Supp.2). Hyattsville, Md.: National Center for Health Statistics, 1998.; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1997.

³⁰Data for individual years indicate that the rate remained at 1.2 percent through 1989 (not shown).

³¹Data for 1996 are preliminary.

Table HC 2.3

Percentage of all very low birth weight^a infants born in the United States, by mother's race/ethnicity^b and by age: selected years, 1970-1996^c

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^d
Total	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.4
Race/ethnicity^b											
White^d	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1
Black^d	2.4	2.4	2.5	2.7	2.9	3.0	3.0	3.0	3.0	3.0	3.0
American Indian/Alaskan Native^d	1.0	1.0	0.9	1.0	1.0	1.1	1.0	1.1	1.1	1.1	—
Asian/Pacific Islander^d	—	—	0.9	0.8	0.9	0.8	0.9	0.9	0.9	0.9	—
Chinese	0.8	0.5	0.7	0.6	0.5	0.7	0.7	0.6	0.6	0.7	—
Japanese	1.5	0.9	0.9	0.8	0.7	0.6	0.8	0.7	0.9	0.9	—
Filipino	1.1	0.9	1.0	0.9	1.1	1.0	1.1	1.0	1.2	1.1	—
Hawaiian and part Hawaiian	—	—	—	—	1.0	1.0	1.0	1.1	1.2	0.9	—
Other Asian or Pacific Islander	—	—	—	—	0.9	0.9	0.9	0.9	0.9	0.9	—
Hispanic origine	—	—	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1
Mexican American	—	—	0.9	1.0	0.9	0.9	0.9	1.0	1.0	1.0	—
Puerto Rican	—	—	1.3	1.3	1.6	1.7	1.7	1.7	1.6	1.8	—
Cuban	—	—	1.0	1.2	1.2	1.2	1.2	1.2	1.3	1.2	—
Central and South American	—	—	1.0	1.0	1.1	1.0	1.0	1.0	1.1	1.1	—
Other and Unknown Hispanic	—	—	1.0	1.0	1.1	1.1	1.1	1.2	1.3	1.3	—
Age											
Under age 15	—	3.1	3.4	3.1	3.2	3.4	3.1	3.6	3.4	3.2	3.2
15-19 years	—	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7
20-24 years	—	1.1	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3
25-29 years	—	0.9	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2
30-34 years	—	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.3
35-49 years	—	1.2	1.2	1.3	1.4	1.5	1.5	1.5	1.6	1.6	1.6

^aBefore 1979, very low birth weight defined as infants weighing 1,500 grams (3lb. 4oz.) or less. From 1979 and beyond, very low birth weight defined as infants weighing less than 1,500 grams (3lb. 4oz.).

^bBirth figures for Hispanic infants in 1980 are based on data from 22 states that reported Hispanic origin on the birth certificate, 23 states and the District of Columbia in 1985, 48 states and the District of Columbia in 1990, 49 states and the District of Columbia in 1992, and 50 states and the District of Columbia since 1993.

^cData for 1996 are preliminary.

^dIncludes persons of Hispanic origin.

^ePersons of Hispanic origin may be of any race.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

HC 2.4

GENERAL HEALTH CONDITIONS: PERCENTAGE OF CHILDREN IN VERY GOOD OR EXCELLENT HEALTH

Most children in the United States are reported by their parents to be in very good or excellent health. The percentage of all children under age 18 reported to be in very good or excellent health has remained at about 80 percent since 1984. These reports vary little by gender; there are modest differences by age of child for some population subgroups (see Table HC 2.4).

Differences by Race. Parents' reports of their children's health vary by race. Between 1984 and 1995, black parents were less likely than white parents to report that their children were in very good or excellent health. In 1995, 72 percent of black children under age 5 were reported in very good or excellent health, compared with 83 percent of white children. Seventy percent of black children ages 5 to 17 were reported in very good or excellent health, compared with 82 percent of white children in this age group (see Table HC 2.4).

Differences by Family Income. Parents' reports of their children's health also vary by family income, with higher-income families more likely to report that their children are in very good or excellent health. For example, in 1995, 67 percent of children under age 5 in families with annual incomes under \$10,000 were reported to be in very good or excellent health, compared with 89 percent of children in families with annual incomes of \$35,000 or more. A similar pattern exists for children ages 5 to 17 (see Figure HC 2.4).

Table HC 2.4

Percentage of children under age 18 in the United States who are reported by their parents to be in very good or excellent health, by age, race, gender, and family income:^a selected years, 1984-1995

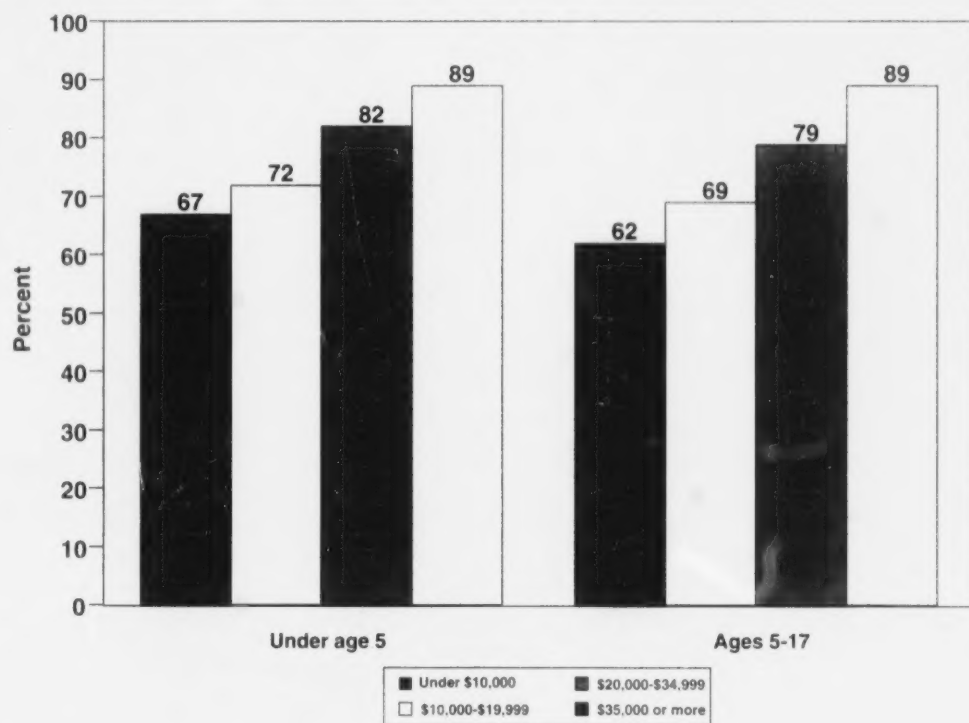
	1984	1987	1990	1992	1993	1994	1995
Under Age 5							
Total	79	81	81	80	80	81	81
Race							
White	81	84	83	82	82	83	83
Black	67	71	72	70	71	72	72
Gender							
Male	78	—	80	79	80	81	80
Female	79	—	82	81	80	81	82
Annual family income^a							
Under \$10,000							67
\$10,000-\$19,999							72
\$20,000-\$34,999							82
\$35,000 or more							89
Ages 5-17							
Total	77	80	80	80	79	79	80
Race							
White	80	83	83	82	81	81	82
Black	65	66	68	68	70	68	70
Gender							
Male	78	—	81	80	79	79	80
Female	77	—	80	79	78	78	80
Annual family income^a							
Under \$10,000							62
\$10,000-\$19,999							69
\$20,000-\$34,999							79
\$35,000 or more							89

^aFamily income is not adjusted in the National Health Interview Survey for comparison over time; therefore, family income is shown only for the most recent year.

Sources: Unpublished data from the National Health Interview Survey, National Center for Health Statistics; Adams, PF, and Marono, M.A. "Current Estimates from the National Health Interview Survey, 1994." *Vital Health Statistics* 10(193). National Center for Health Statistics, 1995. Also previous issues of this report. [Series 10, Nos. 156, 166, 181, 189, and 190, Table 70 in each.]

Figure HC 2.4

Percentage of children under age 18 in the United States who are reported by their parents to be in very good or excellent health, by age and family income: 1995



Sources: Unpublished data from the National Health Interview Survey, National Center for Health Statistics; Adams, P.F., and Marono, M.A. "Current Estimates from the National Health Interview Survey, 1994." *Vital Health Statistics* 10(193). National Center for Health Statistics, 1995. Also previous issues of this report. [Series 10, Nos. 156, 166, 181, 189, and 190, Table 70 in each.]

HC 2.5

CHRONIC HEALTH CONDITIONS

Chronic health problems can cause children to miss school and often require medical assistance and follow-up. Chronic conditions can also create stress for children and their parents, cause parents to miss work, and increase a family's medical expenses.

Over the period from 1984 to 1995, respiratory conditions were the most prevalent chronic health problems experienced by children under age 17 (see Figure HC 2.5). In general, there are few pronounced patterns of improvement or deterioration among those conditions shown (see Table HC 2.5). Two exceptions, however, are asthma and chronic sinusitis. In 1984, asthma affected 43 children per thousand, compared with 75 children per thousand in 1995; chronic sinusitis affected 47 children per thousand in 1984, and 76 children per thousand in 1995.

Table HC 2.5

Selected chronic health conditions^a for children under age 18 (rate per 1,000 children) in the United States: selected years, 1984-1995

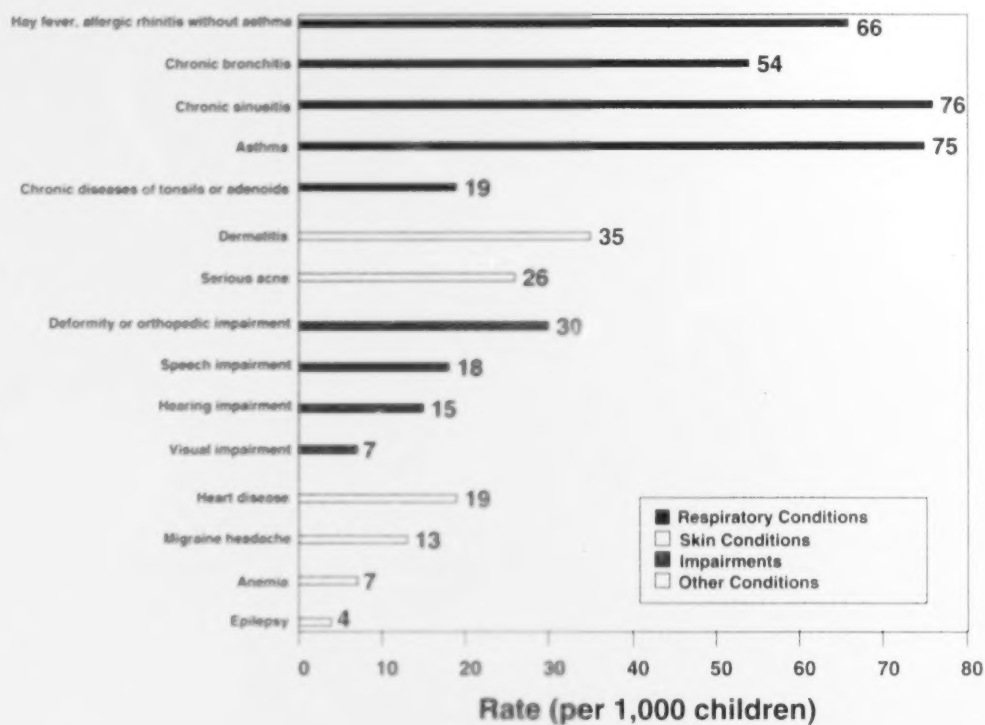
	Rate per 1,000						
	1984	1987	1990	1992	1993	1994	1995
Respiratory conditions							
Hay fever, allergic rhinitis without asthma	61	64	57	71	57	61	66
Chronic bronchitis	50	62	53	54	59	55	54
Chronic sinusitis	47	58	57	69	80	65	76
Asthma	43	53	58	63	72	69	75
Chronic diseases of tonsils or adenoids	34	30	23	28	26	23	19
Skin conditions							
Dermatitis	39	32	31	41	36	38	35
Serious acne	26	26	26	25	28	29	26
Impairments							
Deformity or orthopedic impairment	35	36	29	33	29	28	30
Speech impairment	16	19	14	21	20	21	18
Hearing impairment	24	16	21	15	17	18	15
Visual impairment	9	10	9	10	7	9	7
Other conditions							
Heart disease	23	22	19	19	20	18	19
Migraine headache	11	8	14	13	13	16	13
Anemia	11	8	10	11	9	12	7
Epilepsy	7	4	4	3	5	5	4

^aChronic health conditions as defined in the National Health Interview Survey are conditions that either a) were first noticed three months or more before the reference date of the interview; or b) belong to a group of conditions (including heart diseases, diabetes, and others) that are considered chronic regardless of when they began. The prevalence estimates are based on reports by parents or other adult respondents in response to checklists administered in household interviews.

Sources: Unpublished data from the National Health Interview Survey, National Center for Health Statistics; Adams, P.F., and Marono, M.A. "Current Estimates from the National Health Interview Survey, 1994." *Vital Health Statistics* 10(193). National Center for Health Statistics, 1995. Also previous issues of this report. [Series 10, Nos. 156, 166, 181, 189, and 190, Tables 57 and 62 in each.]

Figure HC 2.5

Selected chronic health conditions^a for children under age 18 (rate per 1,000 children) in the United States: 1995



^aChronic health conditions as defined in the National Health Interview Survey are conditions that either a) were first noticed three months or more before the reference date of the interview; or b) belong to a group of conditions (including heart diseases, diabetes, and others) that are considered chronic regardless of when they began. The prevalence estimates are based on reports by parents or other adult respondents in response to checklists administered in household interviews.

Sources: Unpublished data from the National Health Interview Survey, National Center for Health Statistics; Adams, P.F., and Marono, M.A. "Current Estimates from the National Health Interview Survey, 1994." *Vital Health Statistics* 10(193). National Center for Health Statistics, 1995. Also previous issues of this report. [Series 10, Nos. 156, 166, 181, 189, and 190, Tables 57 and 62 in each.]

HC 2.6

OVERWEIGHT PREVALENCE AMONG CHILDREN AND ADOLESCENTS

Persons who are overweight in adolescence are at greater risk of being overweight as adults, and adults who are overweight are at higher risk of numerous health problems including hypertension, coronary heart disease, gallbladder disease, nonBinsulin dependent diabetes, and some cancers.³² Because being overweight in childhood and adolescence increases the risk of being overweight in adulthood, the trends in overweight prevalence among children and youth have become an important public health concern. Overall, the percentage of children ages 6 through 17 who are overweight has increased more than twofold since the 1960s, with the largest increases seen since 1980 (see Table HC 2.6).³³

Differences by Age. In the earliest period shown on Table HC 2.6 (1963-1965), 5 percent of children ages 6 through 11 were overweight, with this percentage rising to 13.6 percent in the last period (1988-1994). Similar increases are shown among older children ages 12 through 17, although overweight prevalence has been about two percentage points lower for older children in the later time periods.

Differences by Gender. In the latest time period (1988-1994), 14.7 percent of males ages 6 through 11 compared with 12.6 percent of females were overweight, and 12.4 percent of males ages 12 through 17 compared with 10.7 percent of females were overweight.

Differences by Race. Overweight prevalence among male children (ages 6 through 11) and adolescents (ages 12 through 17) ranges within one percentage point between black and white males. The percentage of overweight black female children and adolescents is nearly 6 percentage points above that of their white peers (see Figure HC 2.6).

³²Troiano, R.P., Flegal, K.M., Kuczmarski, R.J., Campbell, S.M., and Johnson, C.L. 1995. "Overweight Prevalence and Trends for Children and Adolescents: The National Health and Nutrition Examination Surveys, 1963-1991." *Archives of Pediatrics and Adolescent Medicine* 149 (October).

³³Overweight is defined as body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cutoff points calculated at 6-month age intervals for children ages 6 through 11 [from the 1963-65 National Health Examination Survey (NHES)] and for adolescents ages 12 through 17 (from the 1966-70 NHES). Age is at time of examination at mobile examination center. This definition differs from that reported in earlier versions of this report, which was based on children at or above the 85th percentile of BMI.

Table HC 2.6

Percentage of overweight^a children and adolescents in the United States, by age, gender, and race:^b selected years, 1963-1994

	1963-1965	1966-1970	1971-1974	1976-1980	1988-1994
Ages 6-11					
Total	5.0	—	5.5	7.6	13.6
Male^b	4.9	—	6.5	8.1	14.7
White	5.4	—	6.6	8.1	14.6
Black	1.7	—	5.6	8.6	15.1
Female^b	5.2	—	4.4	7.1	12.6
White	5.1	—	4.4	6.5	11.7
Black	5.3	—	4.5	11.5	17.4
Ages 12-17					
Total	—	5.0	6.2	5.6	11.5
Male^b	—	5.0	5.3	5.3	12.4
White	—	5.2	5.5	5.3	13.1
Black	—	3.6	4.4	6.0	12.1
Female^b	—	5.0	7.2	6.0	10.7
White	—	4.8	6.6	5.4	10.2
Black	—	6.4	10.5	10.2	15.9

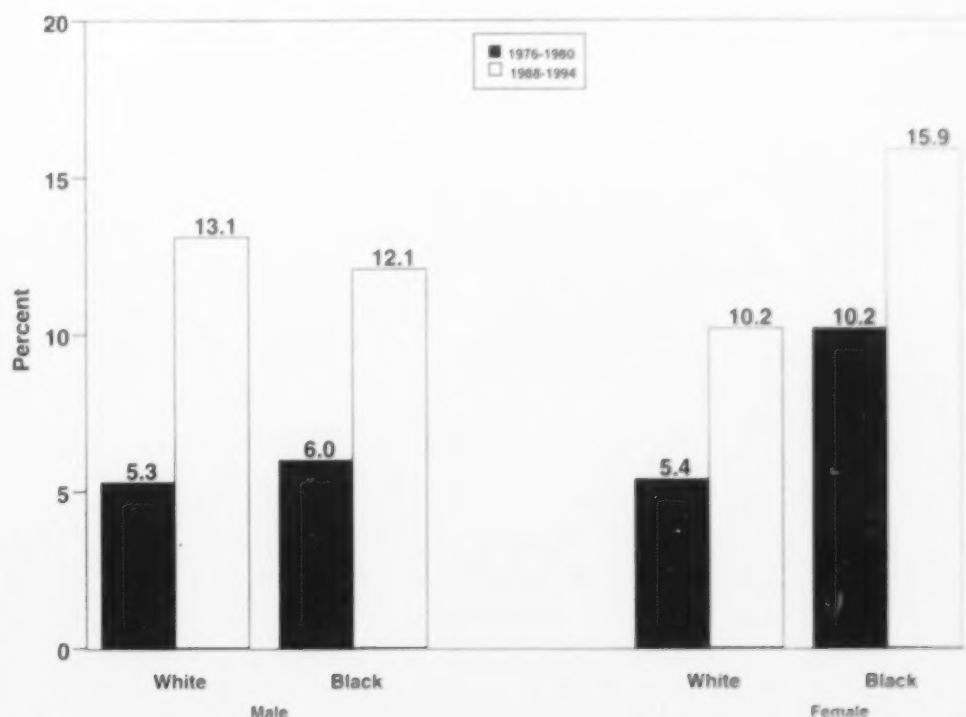
^aOverweight is defined as body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cutoff points calculated at 6-month age intervals for children ages 6 through 11 [from the 1963-1965 National Health Examination Survey (NHES)] and for adolescents ages 12 through 17 (from the 1966-70 NHES). Age is at time of examination at mobile examination center. This definition differs from that reported in earlier versions of this report, which was based on children at or above the 85th percentile of BMI.

^bTotals for male and female children and adolescents include data for race groups not shown separately.

Sources: National Center for Health Statistics. *Health, United States, 1996-97*. Hyattsville, Md.: 1997 (table 73). Estimates were calculated from the National Health Examination Survey (1963-1965 for ages 6 through 11, and 1966-1970 for ages 12 through 17) and from the National Health and Nutrition Examination Survey (NHANES; 1971-1974 for NHANES I, 1976-1980 for NHANES II, and 1988-1994 for NHANES III).

Figure HC 2.6

Percentage of overweight^a adolescents (ages 12 through 17) in the United States, by gender and race: 1976-1980 and 1988-1994



^aOverweight is defined as body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cutoff points calculated at 6-month age intervals for children ages 6 through 11 [from the 1963-1965 National Health Examination Survey (NHES)] and for adolescents ages 12 through 17 (from the 1966-70 NHES). Age is at time of examination at mobile examination center. This definition differs from that reported in earlier versions of this report, which was based on children at or above the 85th percentile of BMI.

Sources: National Center for Health Statistics. *Health, United States, 1996-97*. Hyattsville, Md.: 1997 (table 73). Estimates were calculated from the National Health Examination Survey (1963-1965 for ages 6 through 11, and 1966-1970 for ages 12 through 17) and from the National Health and Nutrition Examination Survey (NHANES, 1971-1974 for NHANES I, 1976-1980 for NHANES II, and 1988-1994 for NHANES III).

HC 2.7

ABUSE AND NEGLECT

Abuse and neglect cause physical and/or emotional harm to children. They can produce short-term psychological consequences that range from poor peer relations to violent behavior, as well as untold long-term psychological and economic consequences when children reach adulthood.³⁴ They can result in serious injury or, in extreme cases, death.

The National Research Council distinguishes four categories of child maltreatment: 1) physical abuse, 2) sexual abuse, 3) emotional maltreatment, and 4) neglect.³⁵ The first three are commonly grouped together under the term "abuse," although there are currently no universally accepted definitions of any of these terms.

According to data from the most comprehensive annual data collection efforts undertaken to date, there were 970,285 child victims of maltreatment in 1995 as measured by the total number of incidences³⁶ which were substantiated or indicated³⁷ by child welfare authorities. While the number of victims reported in Table HC 2.7 is not directly comparable across years due to some year-to-year differences in the number of reporting states and territories, analyses of the 44 states that reported in both 1990 and 1996 show an 18 percent increase in the number of victims between those two years.³⁸ Although maltreatment was about evenly split between abuse and neglect in 1990, neglect accounted for over half the cases by 1995 (see Table HC 2.7).

The number of victims shown in Table HC 2.7 may substantially understate the *actual* number of victims of maltreatment. In order for a child to be included in these counts, a report must first be made to child welfare authorities, an investigation undertaken, and a determination made that maltreatment occurred or was indicated.

Another data source, the third National Incidence Study of Child Abuse and Neglect, yields a much higher estimate of the total number of cases of child maltreatment — possibly as high as 2.8 million children in 1993. This study includes (1) all cases determined to be substantiated or indicated by child protective services³⁹ and (2) cases known to community professionals but not necessarily reported to child protective services (in a representative sample of counties).

Differences by Race. Black children account for a disproportionate share of maltreatment victims relative to their share of the child population (see Table HC 2.7).

- Black children, who constituted 16 percent of all children under age 18, accounted for 27 percent of all victims of child abuse and neglect in 1995.
- White children, who constituted 79 percent of all children under age 18, accounted for 55 percent of abuse and neglect victims in 1995.
- Hispanic children, who constituted 14 percent of all children under age 18, accounted for 10 percent of abuse and neglect victims in 1995.

³⁴Many studies have demonstrated a correlation between child abuse and neglect and serious adult problems, including violence, incarceration, and mental illness; however, these studies have not been able to separate the effects of child abuse and neglect from other factors that are correlated with it, including poverty, education, parenting skills, etc.

³⁵National Research Council, Panel on Child Abuse and Neglect. *Understanding Child Abuse and Neglect*. Washington, D.C.: National Academy Press, 1993.

³⁶In most states, a child is counted each time he or she is the subject of a substantiated or indicated report of maltreatment, meaning that a child who is involved in more than one incident per year is counted more than once.

³⁷Some states have a classification of "indicated" when there is sufficient reason to suspect that a child may have been maltreated or is at risk of maltreatment, but the allegation cannot be substantiated to the level of evidence required by State law.

³⁸U.S. Department of Health and Human Services, Children's Bureau, *Child Maltreatment 1996: Reports from the States to the National Child Abuse and Neglect Data System* (Washington, DC: U.S. Government Printing Office, 1998).

³⁹According to the National Incidence Study, in 1993, only 28 percent of maltreatment cases identified by the study were investigated—a significant decrease from the 44 percent investigated in 1986. The cause of this drop is not clear.

Differences by Age. No age group accounts for an obviously disproportionate share of abuse and neglect victims. In 1995, infants under age 1 accounted for 7 percent of all victims; children ages 1 to 5 accounted for 33 percent; children ages 6 to 12 accounted for 39 percent; and children ages 13 to 17 accounted for 20 percent of all victims (see Table HC 2.7).

Table HC 2.7

Victims of child maltreatment in the United States. Substantiated and indicated^a incidences by type of maltreatment, race/ethnicity,^b gender, and age:^c 1990-1995

	1990	1991	1992	1993	1994	1995
Total						
Number ^d	798,318	857,968	1,002,288	1,018,692	967,398	970,285
Number of reporting states/territories ^e	45	47	51	51	47	48
Type of maltreatment (% of total)						
Abuse	51	50	45	46	44	43
Neglect	49	50	55	54	56	57
Race/ethnicity^b (% of total)						
White	55	56	55	54	56	55
Black	25	27	26	25	26	27
Hispanic	9	10	10	9	9	10
Other	4	4	4	4	4	5
Unknown	7	5	6	9	4	3
Gender (% of total)						
Male	47	46	46	47	47	47
Female	53	54	54	53	53	53
Age (% of total)						
Under age 1	8	8	7	7	7	7
Ages 1-5	31	32	32	33	33	33
Ages 6-12	37	38	37	38	38	39
Ages 13-17	20	20	19	20	20	20
Age 18+/unknown	5	2	5	2	2	2

^aSome states have a classification of "indicated" when there is sufficient reason to suspect that a child may have been maltreated or is at risk of maltreatment, but the allegation cannot be substantiated to the level of evidence required by State law.

^bPersons of Hispanic origin may be of any race. Estimates for whites and blacks include persons of Hispanic origin.

^cSome states have included persons age 18 and older in their statistics on child abuse and neglect. Because these persons are considered victims of child maltreatment under the laws of their state, statistics in this table include these persons. Such individuals accounted for fewer than one percent of all victims.

^dThe total number of substantiated and indicated cases are not directly comparable from year to year because the number of reporting states and territories varies from year to year.

^eThese totals are out of a possible 54 which includes the 50 states, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands.

Note: All data presented are from the National Child Abuse and Neglect Data System (NCANDS), which annually collects information from State child protective agencies. Because State agencies may modify or correct data submitted in a previous year, some findings differ from previously published data.

Sources: Unpublished data, Children's Bureau, U.S. Department of Health and Human Services; unpublished data, National Center on Child Abuse and Neglect, U.S. Department of Health and Human Services; U.S. Department of Health and Human Services, National Center on Child Abuse and Neglect. *Child Maltreatment 1995: Reports from the States to the National Child Abuse and Neglect Data System*. Washington, D.C.: U.S. Government Printing Office, 1997. Also previous issues of this annual report.

HC 2.8

SUICIDAL TEENS: YOUTH WHO HAVE THOUGHT SERIOUSLY ABOUT OR ATTEMPTED SUICIDE

Suicide is a major cause of death among American youth (see Section HC 1.5). Attempted suicide has been related to mental health problems including depression and adjustment or stress reactions, as well as to substance abuse.⁴⁰

In 1995, 24 percent of youth in grades 9 through 12 report having seriously considered suicide during the previous 12 months (see Table HC 2.8.A). During the same time period, 9 percent, or 1 in 11, report having actually attempted suicide during the previous year (see Table HC 2.8.B). These rates are considerably higher than the proportion of youth who actually commit suicide (see Section HC 1.5).

Differences by Race and Hispanic Origin.⁴¹ Black youth report somewhat lower rates of considering suicide in comparison with their white and Hispanic peers (20 percent for black youth versus 25 percent for both whites and Hispanics in 1995). Rates of reported attempted suicide range from 8 percent for whites to 13 percent for Hispanics.

Differences by Gender. In 1995, female youth were more likely than male youth to report having thought seriously about suicide (30 percent versus 18 percent) and having attempted suicide (12 percent versus 6 percent) during the previous year (see Figure HC 2.8); however, the rate of actual suicides, particularly among teens ages 15 to 19, are considerably higher for males than for females, as discussed in section HC 1.5.

Table HC 2.8.A

Percentage of teens in the United States in grades 9 through 12 who report having seriously considered suicide in the previous 12 months, by gender, grade, and race and Hispanic origin:^a selected years, 1990-1995

	1990	1991	1993	1995
Total	27	28	24	24
Male	21	20	19	18
Female	34	36	30	30
Grade				
9	30	28	24	26
10	26	28	25	25
11	29	31	25	26
12	23	25	23	20
Race and Hispanic origin^a				
White non-Hispanic	28	29	24	25
Black non-Hispanic	20	20	20	20
Hispanic	30	26	26	25

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Kann, L., Warren, C.W., Harris, W., A., Collins, J. L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance—United States, 1995." In CDC Surveillance Summaries, September 27, 1996. *Morbidity and Mortality Weekly Report* 1996; 45 (No. 55-4): 1-85. Also previous issues of Surveillance Summaries. All data from Youth Risk Behavior Surveys 1990-1995.

⁴⁰Alcohol, Drug Abuse, and Mental Health Administration. *Report of the Secretary's Task Force on Youth Suicide*. Publication No. (ADM)899-1621. Washington, D.C.: U.S. Department of Health and Human Services, 1989. Cited in *Healthy People 2000: National Health Promotion and Disease Prevention Objectives, Conference Edition*. U.S. Department of Health and Human Services, 1990.

⁴¹Estimates for white and black youth exclude Hispanics of those races.

Table HC 2.8.B

Percentage of teens in the United States in grades 9 through 12 who report having attempted suicide in the previous 12 months, by gender, grade, and race and Hispanic origin:^a selected years, 1990-1995

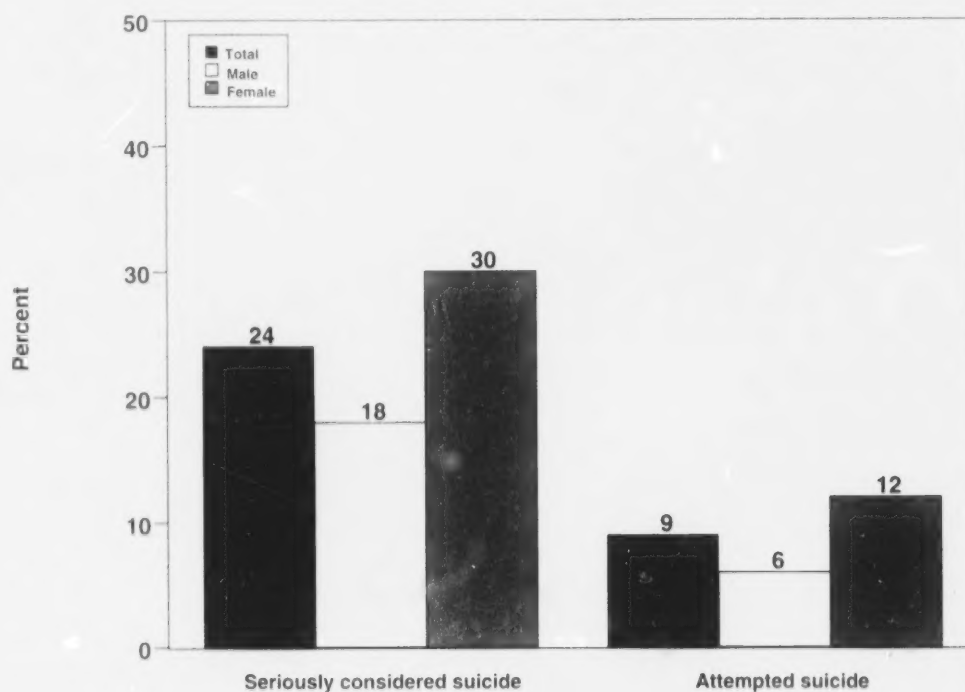
	1990	1991	1993	1995
Total	8	7	9	9
Male	6	4	5	6
Female	10	10	13	12
Grade				
9	9	9	10	11
10	9	7	9	10
11	8	6	8	9
12	7	6	7	6
Race and Hispanic origin^a				
White non-Hispanic	8	6	8	8
Black non-Hispanic	7	6	8	10
Hispanic	12	7	14	13

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance—United States, 1995." In CDC Surveillance Summaries, September 27, 1996. *Morbidity and Mortality Weekly Report* 1996; 45 (No. 55-4): 1-85. Also previous issues of Surveillance Summaries. All data from Youth Risk Behavior Surveys 1990-1995.

Figure HC 2.8

Percentage of teens in the United States in grades 9 through 12 who report having seriously considered suicide or attempted suicide in the previous 12 months, by gender: 1995



Sources: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance—United States, 1995." In CDC Surveillance Summaries, September 27, 1996. *Morbidity and Mortality Weekly Report* 1996; 45 (No. 55-4): 1-85. Also previous issues of Surveillance Summaries. All data from Youth Risk Behavior Surveys 1990-1995.

HC 2.9

ACTIVITY LIMITATIONS

Activity limitations refer to long-term reductions in activities resulting from a chronic disease or impairment.⁴² Two types of activity limitations are examined here: limitations in major activities and limitations in any activity. A person is classified as having an activity limitation if he or she reports 1) an inability to perform the major activity for a person in his or her age group, 2) being able to perform the major activity but being limited in the kind or amount of this activity, or 3) not being limited in the major activity but being limited in the kind or amount of other activities. For children under age 5, the major activity consists of ordinary play. For children ages 5 to 17, the major activity is attending school. Children are classified as being limited in a *major activity* if they are unable to engage in the major activity or are limited in the kind or amount of this activity (classifications (1) and (2) above).

In 1995, 2.7 percent of children under age 5, and 7.4 percent of children ages 5 through 17 had a chronic condition that limited their activity (see Table HC 2.9.A). The percentage of all children under age 18 with a limitation in a major activity due to a chronic condition was 4.3 in 1995 (see Table HC 2.9.B).

Differences by Age. Children ages 5 through 17 are more than twice as likely to experience an activity limitation due to a chronic condition than are younger children. In 1995, 2.7 percent of children under age 5 had an activity limitation due to a chronic condition, compared with 7.4 percent of older children. These differences by age can be seen across family income, gender, race and Hispanic origin categories.

Differences by Gender. Males have consistently accounted for a greater percentage of children ages 5 through 17 with an activity limitation due to a chronic condition. In 1995, 9.0 percent of males, compared with 5.6 percent of females, had activity limitations that were caused by a chronic condition (see Figure HC 2.9.A). Looking only at limitations in *major activities* in 1995, 5.5 percent of males under age 18 had such limitations, compared with 3.1 percent of females (see Figure HC 2.9.B).

Differences by Race and Hispanic Origin.⁴⁴ In 1995, 8.9 percent of black children (ages 5 through 17) had activity limitations, compared with 7.2 percent of white children and 7.5 percent of Hispanic children.

Differences by Income. Disparities in the percentage of children with an activity limitation are most apparent between children in families with annual incomes under \$20,000 and in families with annual incomes of \$20,000 or more (for children ages 5 through 17). In 1995, 6.2 percent of children in families with annual incomes at or over \$20,000 had an activity limitation due to a chronic condition, while 10.9 percent in families with annual incomes below \$20,000 experienced such activity limitations (see Figure HC 2.9.A).

⁴²A disease or impairment is classified as chronic if it has been apparent for at least three months or is a new condition that will ordinarily last for more than three months.

⁴⁴Estimates for white and black children exclude Hispanics of those races.

Table HC 2.9.A

Percentage of children under age 18 in the United States with any activity limitation^a due to a chronic condition,^b by family income, age, gender, race and Hispanic origin:^c 1990-1995

	1990	1991	1992	1993-1994 ^d	1995
Under 5					
Total	2.2	2.4	2.8	3.0	2.7
Annual family income					
Under \$20,000	2.5	3.6	3.6	4.4	3.9
\$20,000 or more	1.9	1.8	2.3	2.2	2.1
Gender					
Male	2.6	2.7	3.3	3.3	3.3
Female	1.7	2.1	2.2	2.6	2.0
Race and Hispanic origin^e					
White, non-Hispanic	2.1	2.4	2.5	2.5	2.7
Black, non-Hispanic	2.9	3.2	4.2	4.8	3.5
Hispanic	2.0	1.8	2.5	2.9	2.5
Ages 5-17					
Total	6.1	7.2	7.5	8.2	7.4
Annual family income					
Under \$20,000	8.1	10.1	11.0	11.5	10.9
\$20,000 or more	5.2	6.0	6.1	6.9	6.2
Gender					
Male	6.9	8.5	8.7	9.7	9.0
Female	5.2	5.9	6.2	6.6	5.6
Race and Hispanic origin^e					
White, non-Hispanic	6.2	7.1	7.4	8.2	7.2
Black, non-Hispanic	6.7	8.2	9.0	9.8	8.9
Hispanic	5.1	7.2	6.7	7.1	7.5

^aPersons are classified in terms of the major activity usually associated with their particular age group. The major activities for children are ordinary play for children under 5 years of age, and attending school for those 5-17 years of age. A person is classified as having an activity limitation if he or she is unable to perform the major activity, is able to perform the major activity but is limited in the kind or amount of this activity, or is not limited in the major activity but is limited in the kind or amount of other activities.

^bA condition is considered chronic if the respondent indicates it was first noticed more than three months before the reference date of the interview, or it is a type of condition that ordinarily has a duration of more than three months.

^cEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

^dEstimates are based on data from 1993 and 1994 combined.

Sources: Unpublished data from the National Health Interview Survey, National Center for Health Statistics; Adams, P.F., and Marono, M.A. "Current Estimates from the National Health Interview Survey, 1994." *Vital Health Statistics* 10(193). National Center for Health Statistics, 1995. Also previous issues of this report. [Series 10, Nos. 181, 184, and 189.]

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Table HC 2.9.B

Percentage of children under age 18 in the United States with any activity limitation in a major activity^a due to a chronic condition,^b by gender and race: selected years, 1983-1995

	1983	1985	1990	1991	1992	1993	1994	1995
Total	3.5	3.7	3.6	4.2	4.4	4.6	4.9	4.3
Gender								
Male	4.2	4.4	4.2	5.0	5.2	5.6	6.0	5.5
Female	2.8	2.9	3.0	3.3	3.7	3.5	3.8	3.1
Race								
White	3.4	3.5	3.5	4.1	4.3	4.5	4.7	4.2
Black	4.5	4.6	4.2	5.2	6.0	5.7	6.7	5.5

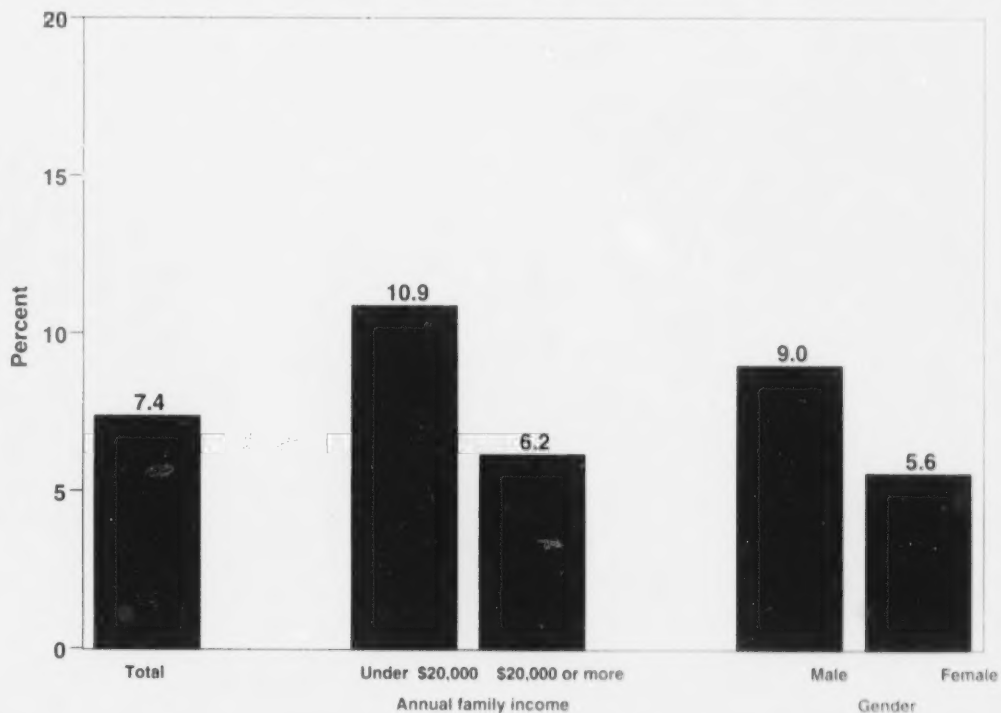
^aPersons are classified in terms of the major activity usually associated with their particular age group. The major activities for children are ordinary play for children under 5 years of age, and attending school for those 5-17 years of age. A person is classified as having an activity limitation in a major activity if he or she is unable to perform the major activity, or is able to perform the major activity but is limited in the kind or amount of this activity.

^bA condition is considered chronic if the respondent indicates it was first noticed more than three months before the reference date of the interview, or it is a type of condition that ordinarily has a duration of more than three months.

Sources: Unpublished data from the National Health Interview Survey, National Center for Health Statistics; Adams, P.F., and Marono, M.A. "Current Estimates from the National Health Interview Survey, 1994." *Vital Health Statistics* 10(193). National Center for Health Statistics, 1995. Also previous issues of this report. [Series 10, Nos. 154, 163, 181, 184, 189, and 190.]

Figure HC 2.9.A

Percentage of children ages 5 through 17 in the United States with any activity limitation^a due to a chronic condition,^b by family income and gender: 1995



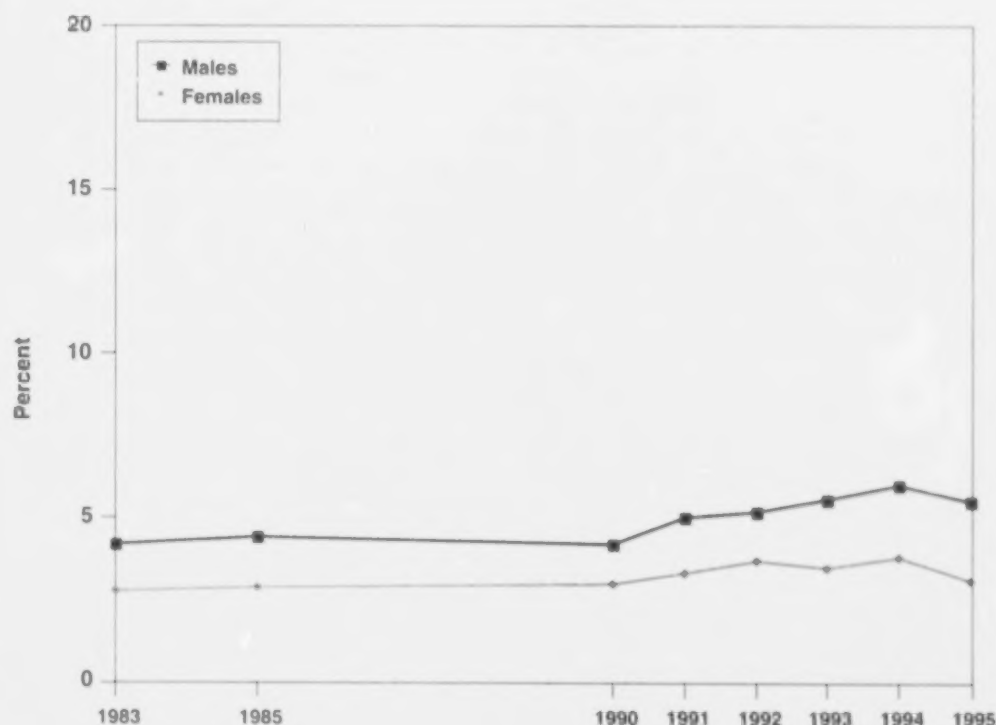
^aPersons are classified in terms of the major activity usually associated with their particular age group. The major activities for children are ordinary play for children under 5 years of age, and attending school for those 5-17 years of age. A person is classified as having an activity limitation if he or she is unable to perform the major activity, is able to perform the major activity but is limited in the kind or amount of this activity, or is not limited in the major activity but is limited in the kind or amount of other activities.

^bA condition is considered chronic if the respondent indicates it was first noticed more than three months before the reference date of the interview, or it is a type of condition that ordinarily has a duration of more than three months.

Sources: Unpublished data from the National Health Interview Survey, National Center for Health Statistics; Adams, P.F., and Marono, M.A. "Current Estimates from the National Health Interview Survey, 1994." *Vital Health Statistics* 10:193. National Center for Health Statistics, 1995. Also previous issues of this report. [Series 10, Nos. 181, 184, and 189.]

Figure HC 2.9.B

Percentage of children under age 18 in the United States with an activity limitation in a major activity^a due to a chronic condition,^b by gender: selected years, 1983-1995



^aPersons are classified in terms of the major activity usually associated with their particular age group. The major activities for children are ordinary play for children under 5 years of age, and attending school for those 5-17 years of age. A person is classified as having an activity limitation in a major activity if he or she is unable to perform the major activity, or is able to perform the major activity but is limited in the kind or amount of this activity.

^bA condition is considered chronic if the respondent indicates it was first noticed more than three months before the reference date of the interview, or it is a type of condition that ordinarily has a duration of more than three months.

Sources: Unpublished data from the National Health Interview Survey, National Center for Health Statistics; Adams, P.F., and Marono, M.A. "Current Estimates from the National Health Interview Survey, 1994." *Vital Health Statistics* 10(193). National Center for Health Statistics, 1995. Also previous issues of this report. [Series 10, Nos. 154, 163, 181, 184, 189, and 190.]

HC 2.10

LEAD EXPOSURE

Exposure to lead has long been recognized as a serious health hazard, particularly for infants, toddlers, and preschool-age children, whose developing nervous systems are sensitive to lead. Research during the past two decades has shown that adverse health effects can occur from blood lead levels (BLLs) that had previously been considered safe. Based on this research, the Centers for Disease Control and Prevention now consider BLLs at least as low as ten micrograms per deciliter of blood as hazardous for children ages 1 to 5.⁴⁶

Dramatic Decreases in Blood Lead Levels. The percentage of very young children who have elevated blood lead levels declined dramatically in the 1980s (see Figure HC 2.10). Data gathered between 1976 and 1980 revealed that 88.2 percent of children between the ages of 1 and 5 had blood lead levels that have been associated with adverse health effects. Subsequent data gathered between 1988 and 1991 found that only 8.9 percent of children had elevated levels of lead in their blood. Data gathered between 1991 and 1994 reflect that 4.4 percent of children ages 1 through 5 had elevated blood lead levels. These dramatic decreases have been attributed primarily to the removal of lead from gasoline and from soldered food and soft drink cans.⁴⁷ Other contributing factors have been the ban on leaded paint for residential use in the 1970s, the ban on lead in solder for household plumbing, and the ongoing screening of children for lead exposure.

Populations with Elevated Blood Lead Levels. Non-Hispanic black children, poor and near-poor children, and children living in the central areas of large cities face considerably higher risks of being exposed to high levels of lead than other children.⁴⁸ In the latest time period shown (1991-1994):

- Among non-Hispanic black children, 11.2 percent had elevated blood lead levels, compared with 2.3 percent of non-Hispanic white children (see Table HC 2.10.A).
- Poor children (in families with annual incomes less than or equal to 130 percent of the poverty threshold), at 8 percent, had the highest percentage of elevated blood lead levels, compared with 1.9 percent of children in middle-income families and 1 percent of children in high-income families (see Table HC 2.10.B).
- The percentage of children living in large urban areas (populations of at least one million) with elevated blood lead levels was 5.4 percent, compared with 3.3 percent of children living in other areas (see Table HC 2.10.B).

Differences by Year Housing Built. Deteriorating lead-based paint and lead-contaminated dust in older homes are the primary source of lead exposure for children in the United States today.⁴⁹ The prevalence of elevated blood lead levels is lower for children who live in housing built after 1973. This holds true for all children across race, income, and urban status categories.⁵⁰ Likewise, the higher prevalence of elevated blood lead levels among non-Hispanic black children, children in families with low income, and children living in more urban areas can still be seen across the categories reflecting age of housing (see Table HC 2.10.B).

⁴⁶Centers for Disease Control and Prevention. *Preventing Lead Poisoning in Young Children: A Statement by the Centers for Disease Control and Prevention*. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service, 1991.

⁴⁷Pirkle, J.L., Brody, D.J., Gunter, E.W., Kramer, R.A., Paschal, D.C., Flegal, K.M., and Matte, T.D. 1994. "The Decline in Blood Lead Levels in the United States: The National Health and Nutrition Examination Surveys (NHANES)." *JAMA* 272(4): 284-291.

⁴⁸Centers for Disease Control and Prevention. February 21, 1997. "Update: Blood Lead Levels — United States, 1991-1994." *Morbidity and Mortality Weekly Report* 46(7).

⁴⁹Centers for Disease Control and Prevention. February 21, 1997. "Update: Blood Lead Levels — United States, 1991-1994." *Morbidity and Mortality Weekly Report* 46(7); Pirkle, J.L., Brody, D.J., Gunter, E.W., Kramer, R.A., Paschal, D.C., Flegal, K.M., and Matte, T.D. 1994. "The Decline in Blood Lead Levels in the United States: The National Health and Nutrition Examination Surveys (NHANES)." *JAMA* 272(4): 284-291.

⁵⁰Centers for Disease Control and Prevention. February 21, 1997. "Update: Blood Lead Levels — United States, 1991-1994." *Morbidity and Mortality Weekly Report* 46(7).

Table HC 2.10.A

Percentage of children ages 1 through 5 in the United States with blood lead levels greater than or equal to ten micrograms per deciliter, by age and race/ethnicity:^c selected years, 1976-1994^a

	1976-1980	1988-1991	1991-1994 ^a
All children ages 1-5^b	88.2	8.9	4.4
Ages 1-2	88.3	11.5	5.9
Ages 3-5	88.1	7.3	3.5
Race/ethnicity^c			
White, non-Hispanic	85.0	5.5	2.3
Black, non-Hispanic	97.7	20.6	11.2

^aConstraints of the survey design of NHANES III (the Third National Health and Nutrition Examination Survey) preclude statistical testing for the differences in weighted geometric mean blood lead levels (BLLs) and the prevalence of elevated BLLs from Phase 1 to Phase 2. Data are presented for descriptive purposes, however comparisons between Phases should be made with caution.

^bTotals include children ages 1 through 5 of all race/ethnicity groups beyond those shown separately.

^cEstimates for whites and blacks exclude Hispanics of those races.

Sources: Centers for Disease Control and Prevention. February 21, 1997. "Update: Blood Lead Levels -- United States, 1991-1994." *Morbidity and Mortality Weekly Report* 46(7); Pirkle, J.L., Brody, D.J., Gunter, E.W., Kramer, R.A., Paschal, D.C., Flegal, K.M., and Matte, T.D. 1994. "The Decline in Blood Lead Levels in the United States: The National Health and Nutrition Examination Surveys (NHANES)." *JAMA* 272(4): 284-291; Brody, D.J., Pirkle, J.L., Kramer, R.A., Flegal, K.M., Matte, T.D., Gunter, E.W., and Paschal, D.C. 1994. "Blood Lead Levels in the U.S. Population: Phase 1 of the Third National Health and Nutrition Examination Survey (NHANES III, 1988 to 1991)." *JAMA* 272(4): 277-283.

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Table HC 2.10.B

Percentage of children ages 1 through 5 in the United States with blood lead levels greater than or equal to ten micrograms per deciliter, by year housing built, race and ethnicity,^b family income,^c and urban status:^d selected years, 1991-1994 (combined)

	Total ^a	Year Housing Built		
		Before 1946	During 1946-1973	After 1973
Total ^a	4.4	8.6	4.6	1.6
Race/ethnicity^b				
White, non-Hispanic	2.3	5.6	1.4	1.5
Black, non-Hispanic	11.2	21.9	13.7	3.4
Annual family income^c				
Low	8.0	16.4	7.3	4.3
Middle	1.9	4.1	2.0	0.4
High	1.0	0.9	2.7	*
Urban status^d				
Population 1 million and more	5.4	11.5	5.8	0.8
Population less than 1 million	3.3	5.8	3.1	2.5

^aTotals include children ages 1 through 5 of all race/ethnicity groups beyond those shown separately.

^bEstimates for whites and blacks exclude Hispanics of those races.

^cIncome categories were defined using the poverty-income ratio (PIR; the ratio of total family income to the poverty threshold for the year of the interview); low income was defined as PIR $\leq$ 1.300; middle, as PIR 1.301-3.500; and high, as PIR $\geq$ 3.501. Persons with data missing for income were not included in the analysis of income.

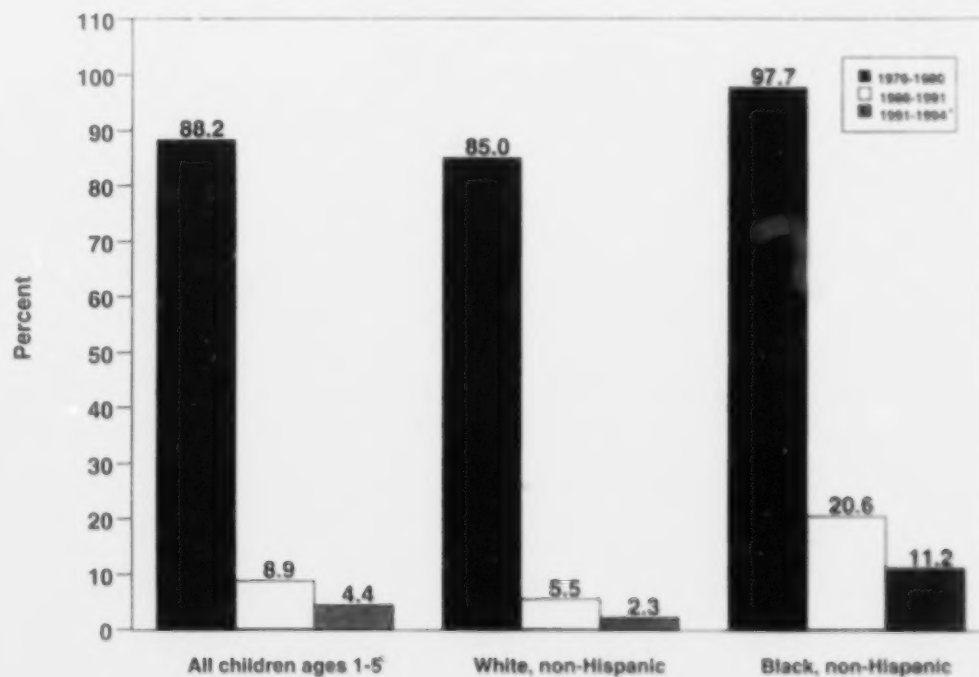
^dUrban status was based on U.S. Department of Agriculture codes that classify counties by total population and proximity to major metropolitan areas, and was divided into two categories: metropolitan areas with a population greater than or equal to 1 million, and metropolitan and nonmetropolitan areas with a population less than 1 million.

*No children in the sample had these characteristics, however the true estimate for this population group is probably larger than zero.

Source: Centers for Disease Control and Prevention. February 21, 1997. "Update: Blood Lead Levels--United States, 1991-1994." *Morbidity and Mortality Weekly Report* 46(7). Data from the Third National Health and Nutrition Examination Survey, Phase 2.

Figure HC 2.10

Percentage of children ages 1 through 5 in the United States with blood lead levels greater than or equal to ten micrograms per deciliter, by race/ethnicity:^a selected years, 1976-1994^b



^aEstimates for whites and blacks exclude Hispanics of those races.

^bConstraints of the survey design of NHANES III preclude statistical testing for the differences in weighted geometric mean blood lead levels (BLLs) and the prevalence of elevated BLLs from Phase 1 to Phase 2. Data are presented for descriptive purposes, however comparisons between Phases should be made with caution.

^cTotals include children ages 1 through 5 of all race/ethnicity groups beyond those shown separately.

Sources: Centers for Disease Control and Prevention. February 21, 1997. "Update: Blood Lead Levels - United States, 1991-1994." *Morbidity and Mortality Weekly Report* 46(7); Pirkle, J.L., Brody, D.J., Gunter, E.W., Kramer, R.A., Paschal, D.C., Flegal, K.M., and Matte, T.D. 1994. "The Decline in Blood Lead Levels in the United States: The National Health and Nutrition Examination Surveys (NHANES)." *JAMA* 272(4): 284-291; Brody, D.J., Pirkle, J.L., Kramer, R.A., Flegal, K.M., Matte, T.D., Gunter, E.W., and Paschal, D.C. 1994. "Blood Lead Levels in the U.S. Population: Phase 1 of the Third National Health and Nutrition Examination Survey (NHANES III, 1988 to 1991)." *JAMA* 272(4): 277-283.

HC 2.11

VIOLENT VICTIMIZATION OF TEENS

Violent crimes include simple and aggravated assaults, rape, and robbery (stealing by force or threat of violence). In order to keep track of the incidence of these and other crimes, the United States has been administering the National Crime Victimization Survey on an annual basis since 1972.

Among youth ages 12 to 17, rates of victimization for violent crimes rose from 79 to 99 per thousand between 1980 and 1990 (see Table HC 2.11). Rates continued to increase to a high of 123 per thousand in 1993 before declining slightly to 118 per thousand in 1994.

Differences by Gender. Male youth are considerably more likely than female youth to be victims of violent crimes. In 1994, 141 per thousand males ages 12 through 17 were victims of violent crimes, compared with 95 per thousand females (see Figure HC 2.11).

Differences by Race. Black youth have consistently been more likely than white youth to be victims of violent crimes. Rates for both black and white youth have risen by approximately 50 percent from 1980 to 1994, maintaining the disparity between the races over time. In 1994, 136 black youths per thousand were victims of violent crime, compared with 118 per thousand among white youth ages 12 through 17.

Table HC 2.11

**Violent victimization^a of youth ages 12 through 17 in the United States
(rates per 1,000), by age, race, and gender: selected years, 1980-1994**

	1980	1985	1990	1991	1992	1993	1994
Age							
12-17 years	79	84	99	106	118	123	118
12-14 years	70	81	102	98	119	121	118
15-17 years	87	87	95	115	116	125	119
Race							
White	78	88	95	105	121	126	118
Black	91	69	122	128	112	133	136
Other	50	72	76	54	79	49	65
Gender							
Male	106	113	131	149	146	149	141
Female	50	54	64	61	88	96	95

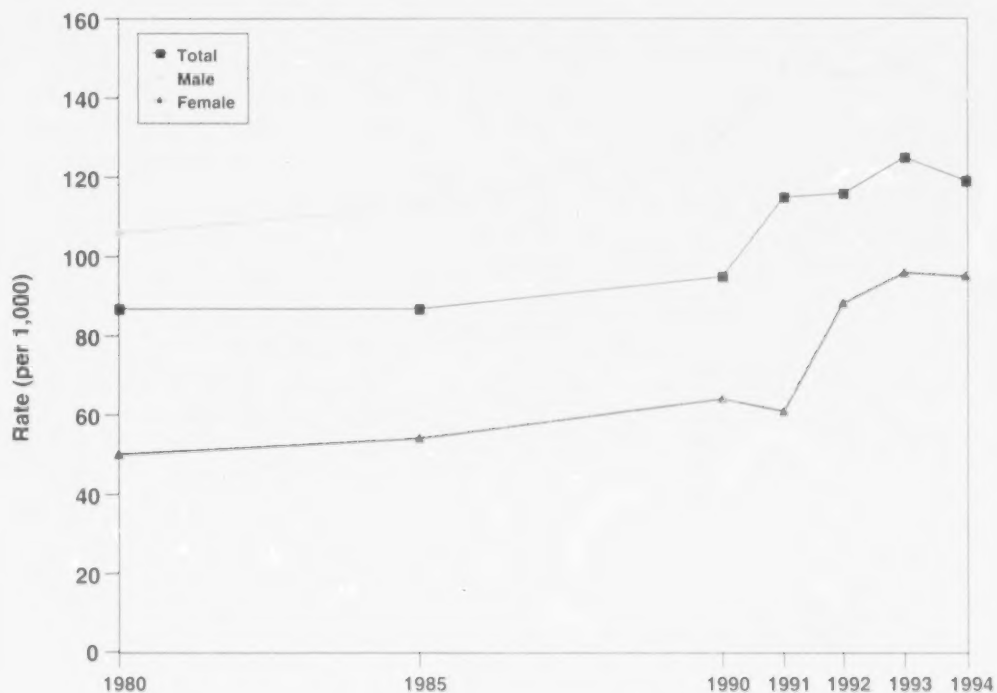
^aViolent victimization is defined as being a victim of a violent crime, including simple and aggravated assaults, rape, and robbery (stealing by force or threat of violence).

Notes: Because of changes made in the victimization survey, data prior to 1992 are adjusted to make them comparable with data collected under the redesigned methodology. Victimization rates were calculated using population estimates from the U.S. Bureau of the Census, Current Population Reports. Such population estimates normally differ somewhat from population estimates derived from survey data. The rates may therefore differ marginally from rates based upon survey-derived population estimates.

Source: Unpublished tables, U.S. Bureau of Justice Statistics, National Crime Victimization Survey, 1980-1994.

Figure HC 2.11

Violent victimization^a of youth ages 12 through 17 in the United States (rates per 1,000), by gender: selected years, 1980-1994



^aViolent victimization is defined as being a victim of a violent crime, including simple and aggravated assaults, rape, and robbery (stealing by force or threat of violence).

Notes: Because of changes made in the victimization survey, data prior to 1992 are adjusted to make them comparable with data collected under the redesigned methodology. Victimization rates were calculated using population estimates from the U.S. Bureau of the Census, Current Population Reports. Such population estimates normally differ somewhat from population estimates derived from survey data. The rates may therefore differ marginally from rates based upon survey-derived population estimates.

Source: Unpublished tables, U.S. Bureau of Justice Statistics, National Crime Victimization Survey, 1980-1994.

HC 2.12

DENTAL CARIES

"Dental caries" is a technical term referring to either treated or untreated tooth decay in one or more teeth. Proper preventive care reduces the incidence of dental caries. The presence of dental caries may indicate a lack of access to preventive care or a lack of information about preventive techniques.⁴⁹

Differences by Race/Ethnicity.⁵⁰ Mexican American children ages 2 through 4 had the highest prevalence of dental caries in their primary teeth (see Figure HC 2.12). Almost one-third of Mexican American children had dental caries, compared with 22 percent of non-Hispanic black children and 13 percent of non-Hispanic white children. Mexican American children also had the highest prevalence of dental caries in permanent teeth, but the gap among children ages 5 through 17 was much smaller than it was for younger children. Non-Hispanic black children had the lowest percentage of dental caries with 39 percent, compared with 45 percent for non-Hispanic white children and 49 percent for Mexican American children (see Table HC 2.12).

Table HC 2.12

Percentage of children ages 2 through 17 in the United States with dental caries, by age and race/ethnicity:^a 1988-1991

	White, non-Hispanic	Black, non-Hispanic	Mexican American
Ages 2-4 (dental caries in primary teeth)	13	22	32
Ages 5-17 (dental caries in permanent teeth)	45	39	49

^aEstimates for whites and blacks exclude Hispanics of those races.

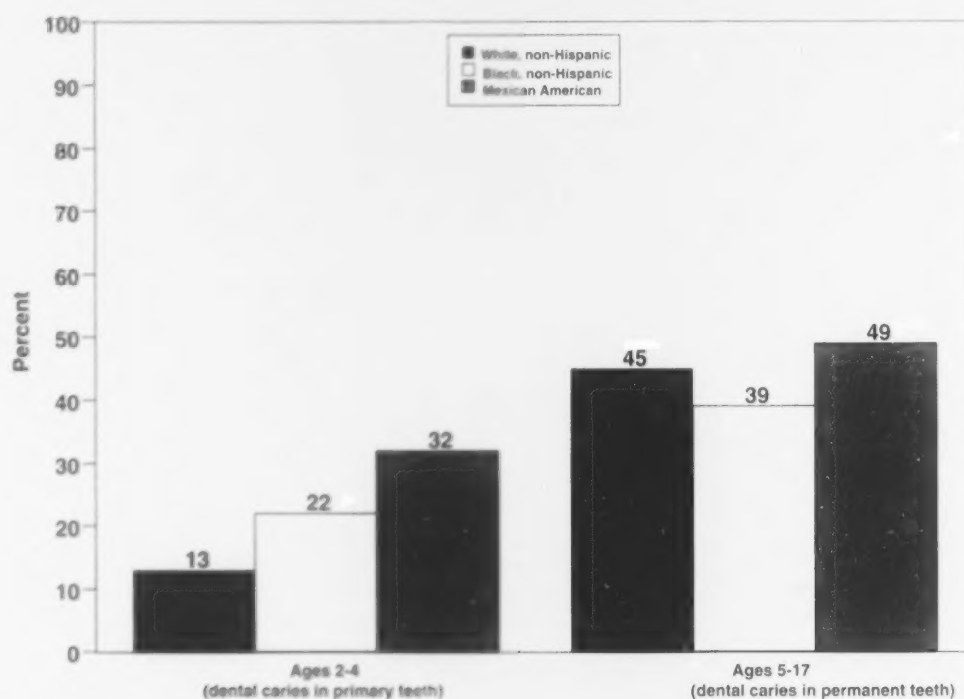
Source: Kaste, L.M., Selwitz, R.H., Oldakowski, R.J., Brunelle, J.A., Winn, D.M., and Brown, L.J. 1996. "Coronal Caries in the Primary and Permanent Dentition of Children and Adolescents 1-17 Years of Age: United States, 1988-1991." *Journal of Dental Research* 75(Spec Iss): 631-641. Rockville, Md.: National Institutes of Health. National Institute of Dental Research, Division of Epidemiology and Oral Disease Prevention.

⁴⁹Kaste, L.M., Selwitz, R.H., Oldakowski, R.J., Brunelle, J.A., Winn, D.M., and Brown, L.J. 1996. "Coronal Caries in the Primary and Permanent Dentition of Children and Adolescents 1-17 Years of Age: United States 1988-1991." *Journal of Dental Research* 75(Spec Iss): 631-641. Rockville, Md.: National Institutes of Health. National Institute of Dental Research, Division of Epidemiology and Oral Disease Prevention.

⁵⁰Estimates for whites and blacks exclude Hispanics of those races.

Figure HC 2.12

Percentage of children ages 2 through 17 in the United States with dental caries, by age and race/ethnicity:^a 1988-1991



^aEstimates for whites and blacks exclude Hispanics of those races.

Sources: Kaste, L.M., Schwitz, R.H., Oldakowski, R.J., Brunelle, J.A., Winn, D.M., and Brown, L.J. 1996. "Coronal Caries in the Primary and Permanent Dentition of Children and Adolescents 1-17 Years of Age: United States, 1988-1991." *Journal of Dental Research* 75(Spec Iss): 631-641. Rockville, Md.: National Institutes of Health. National Institute of Dental Research, Division of Epidemiology and Oral Disease Prevention.

HC 2.13

CHILDREN AND ADOLESCENTS WITH HIV/AIDS

Pediatric AIDS. Through June 1997, 7,902 cases of AIDS in children younger than 13 years old have been reported in the United States. Pediatric AIDS cases represent 1.3 percent of all cumulative reported cases (612,078) to the Centers for Disease Control and Prevention. The vast majority—91 percent—of these cases result from transmission before or during birth or what is known as perinatal transmission.⁵¹

The estimated number of children under age 13 who acquired AIDS before or during birth increased each year during the period from 1984 through 1992. From 1992 through 1996, however, the number of cases of children with perinatally acquired AIDS has declined by 43 percent (see Figure HC 2.13.A). A contributing factor to this dramatic decrease was the U.S. Public Health Service's (USPHS) recommendation in August 1994 for the use of zidovudine (ZDV) therapy to reduce perinatal transmission.⁵² In addition, in July 1995, the USPHS recommended universal HIV counseling and voluntary testing for all pregnant women in the United States.

Differences by Race and Hispanic Origin. In 1996, the estimated number of black, non-Hispanic children under age 13 with perinatally acquired AIDS was nearly five times the estimated number of cases among white, non-Hispanic children, and about three times the estimated number of cases among Hispanic children (see Table HC 2.13.A). These differences are even more pronounced when rates are examined. Figure HC 2.13.B shows the rates of total pediatric AIDS cases (not just perinatally-acquired cases) by race and Hispanic origin in 1996.

Adolescent HIV/AIDS. Over the past decade, the number of AIDS cases reported each year among adolescents ages 13 through 19 has increased substantially. In 1986, 53 adolescents were reported with AIDS. By 1996, the number of cases reported for the year rose to 403. Through June 1997, a total of 2,953 AIDS cases among adolescents have been reported.⁵³ Up to 25 percent of the new cases of HIV infection that occur in the United States each year may be among young people under age 22, and as many as 50 percent may be among young people under age 25.⁵⁴

Although the number of adolescents with AIDS is relatively small, substantially more young people are infected with HIV than are living with AIDS. HIV surveillance data in 25 states, collected from January 1994 through June 1997, indicate that 14 percent of individuals in whom HIV infection was the initial diagnosis were adolescents and young adults ages 13 through 24 years, compared with 3 percent in whom AIDS was the initial diagnosis.⁵⁵ Since the period between HIV infection and AIDS diagnosis can be many years, the large numbers of people who develop AIDS in their 20s likely became infected with HIV as adolescents. Through June 1997, cumulative reported cases of AIDS have reached more than 22,000 among adults ages 20 through 24 and more than 85,000 among adults ages 25 through 29.

AIDS incidence—diagnosed, rather than reported cases—among adolescents can provide a more accurate picture of trends among different groups over time. Table HC 2.13.B presents estimated AIDS incidence among adolescents ages 13 through 19. Each of the figures (Figures HC 2.13.C and HC 2.13.D) also present the estimated incidence of AIDS among young adults ages 20 through 24 to show the substantial increases in diagnosed cases among this age group and the continuation of patterns across gender and race and ethnic groups.

Differences by Race and Hispanic Origin. Among adolescents ages 13 through 19 with AIDS, racial and ethnic minority teens are disproportionately affected. Taken together, cases of AIDS among black and Hispanic adolescents accounted for approximately 75 percent of both reported and diagnosed cases

⁵¹Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report*, 1997; 9(1):[8-11].

⁵²Centers for Disease Control and Prevention. November 21, 1997. "Update: Perinatally Acquired HIV/AIDS — United States, 1997." *Morbidity and Mortality Weekly Report* 46(46).

⁵³Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report*, 1997; 9(1).

⁵⁴Rosenberg, P.S., Biggar, R.J., and Goedert, J.J. "Declining Age at HIV Infection in the United States." *NEJM* 330(11):789-90.

⁵⁵Centers for Disease Control and Prevention. April 24, 1998. "Diagnosis and Reporting of HIV and AIDS in States with Integrated HIV and AIDS Surveillance—United States, January 1994–June 1997." *Morbidity and Mortality Weekly Report* 47(15).

in 1996. This trend is particularly evident since 1992 as the number of diagnosed cases among black adolescents has surpassed the number among their white peers (see Table 2.13.B and Figure HC 2.13.B).

Differences by Gender. The proportion of adolescent females ages 13 through 19 with diagnosed cases of AIDS has increased from approximately 20 percent of diagnosed cases in 1986 to nearly half of diagnosed cases for that age group in 1996 (see Table HC 2.13.B and Figure HC 2.13.C).

Table HC 2.13.A

Estimated number of children under age 13 in the United States with perinatally acquired AIDS, by age and race and Hispanic origin: 1992-1996

Age ^a	1992	1993	1994	1995	1996
All children under age 13	901	862	792	661	516
Under age 5	733	693	613	459	360
Ages 5-12	168	169	179	202	156
Race and Hispanic Origin^b					
White, non-Hispanic	133	126	92	95	67
Black, non-Hispanic	566	531	522	415	331
Hispanic	195	195	166	146	111

^aAge represents age at AIDS diagnosis. Totals for ages include other race and ethnic groups not specified.

^bPersons of Hispanic origin may be of any race.

Source: Centers for Disease Control and Prevention. November 21, 1997. "Update: Perinatally Acquired HIV/AIDS -- United States, 1997." *Morbidity and Mortality Weekly Report* 46(46).

Table HC 2.13.B

Estimated AIDS incidence in adolescents ages 13 through 19 in the United States, by gender and race and Hispanic origin: 1981-1996

Year	Total ^a	Male	Female	White	Black	Hispanic
1981	*	*	*	*	*	*
1982	10	10	*	10	*	*
1983	10	10	10	*	10	*
1984	40	40	10	20	10	10
1985	60	50	10	20	30	10
1986	100	80	20	40	30	20
1987	110	90	20	50	40	10
1988	140	100	40	60	50	30
1989	160	110	50	70	60	30
1990	190	130	70	70	70	40
1991	200	140	60	90	80	40
1992	220	120	100	70	100	40
1993	240	150	90	70	110	50
1994	220	140	90	70	120	40
1995	220	120	100	60	110	40
1996	220	120	110	50	120	60

*Indicates that the number of cases is less than 10.

^aTotals include other race and ethnic groups not specified. Totals may not equal the sum of the rows due to rounding.

Note: Data are adjusted for reporting delay and for the 1993 expansion of the case definition.

Sources: Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention.

Figure HC 2.13.A

Reported perinatally acquired AIDS cases among children under age 13 in the United States: 1986-1996

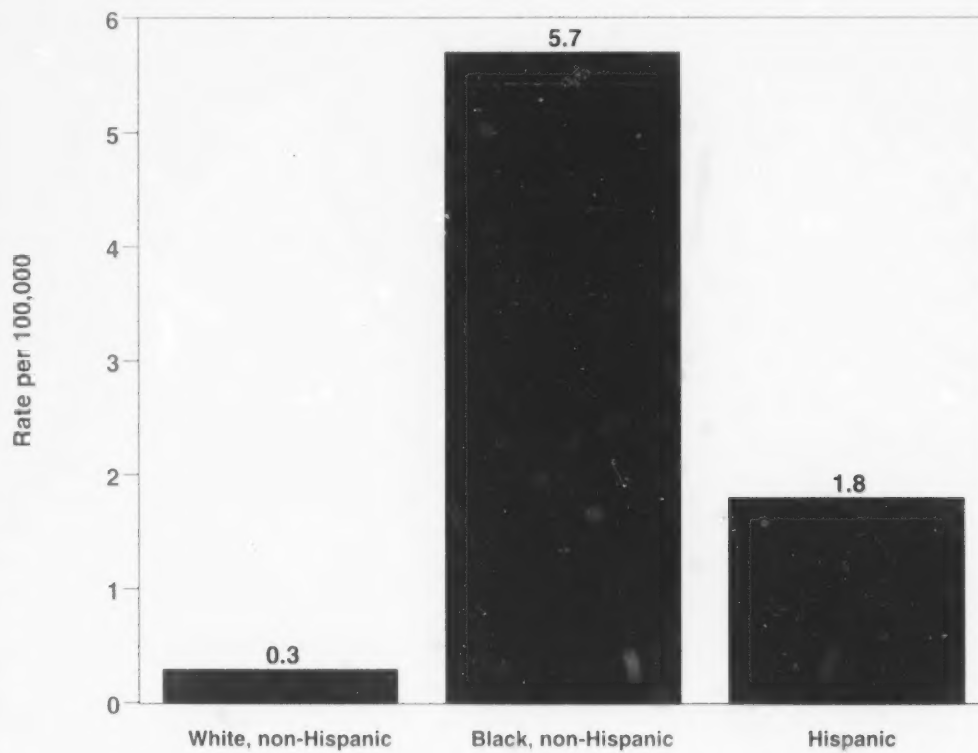


Note: Data are adjusted for reporting delays and unreported risk.

Sources: Pediatric AIDS Surveillance, 1,262 slide series (through 1996). Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention.

Figure HC 2.13.B

Reported AIDS rate (per 100,000) among children under age 13 in the United States, by race and Hispanic origin,^a 1996

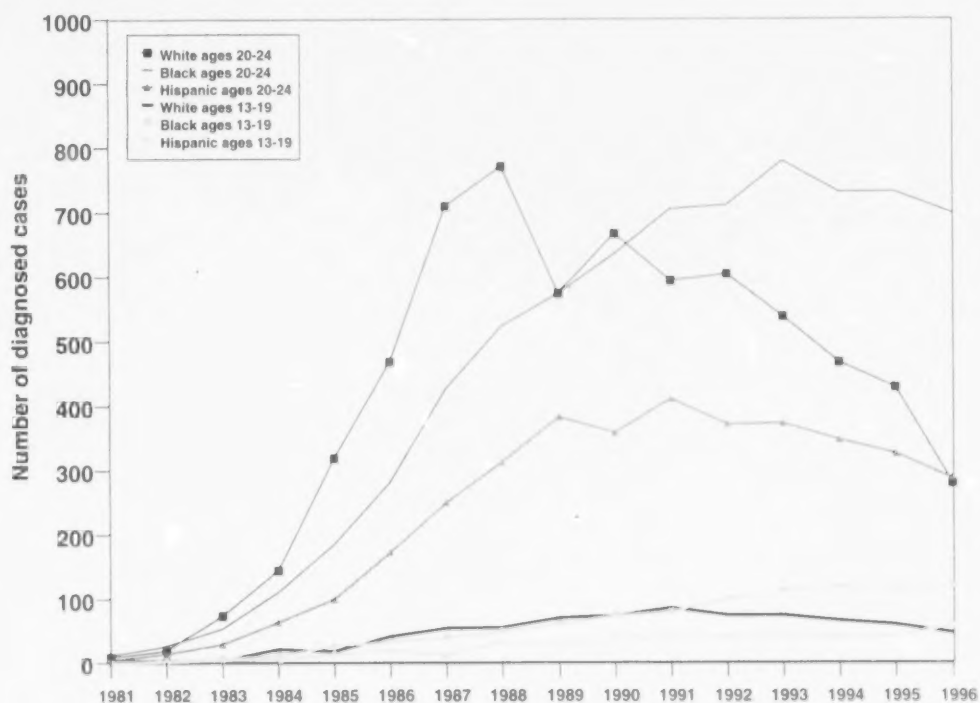


^aPersons of Hispanic origin may be of any race.

Sources: Pediatric AIDS Surveillance, L262 slide series (through 1996). Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention.

Figure HC 2.13.C

Estimated AIDS incidence in adolescents ages 13 through 19 and young adults ages 20 through 24 in the United States, by race and Hispanic origin: 1981-1996

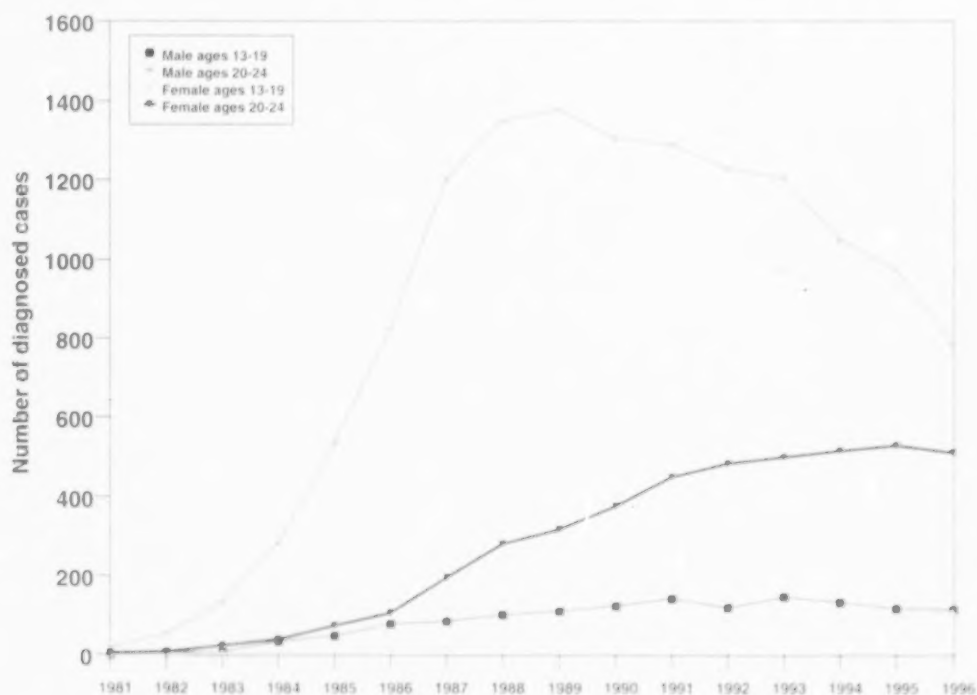


Note: Data are adjusted for reporting delay and for the 1993 expansion of the case definition.

Sources: Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention.

Figure HC 2.13.D

Estimated AIDS incidence in adolescents ages 13 through 19 and young adults ages 20 through 24 in the United States, by gender: 1981-1996



Note: Data are adjusted for reporting delay and for the 1993 expansion of the case definition.

Sources: Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention.

HC 2.14

SEXUALLY TRANSMITTED DISEASES AMONG ADOLESCENTS

Sexually transmitted diseases (STDs) have potentially severe consequences. Gonorrhea infections are a major cause of pelvic inflammatory disease, which in turn may lead to adverse reproductive consequences such as infertility, ectopic pregnancy, or the birth of children with physical and mental developmental disabilities. Syphilis facilitates the transmission of HIV and may be particularly important to contributing to HIV transmission in areas with high rates of both infections.⁵⁶ The increase in sexual activity among teenagers described in Section SD 4.1 has exposed a growing number of young people to the risk of sexually transmitted diseases. Despite this increased risk, the reported rate of incidence has declined among adolescents for both gonorrhea and syphilis.

Decline in Gonorrhea Rates. Gonorrhea rates have declined for all youth since 1975 (see Table HC 2.14.A). Among youth ages 15 through 19, rates decreased by almost half, from 1,275.1 cases of gonorrhea per 100,000 youth in 1975, to 570.8 cases per 100,000 youth in 1996. Gonorrhea rates also decreased among youth ages 10 through 14, but the decline started in more recent years and has not been as dramatic as among older youth. The rate for this age group peaked at 68.9 cases per 100,000 youth in 1990; by 1996, the reported rate had declined to 32.9 cases per 100,000 youth ages 10 through 14.

Differences in Gonorrhea Rates by Gender. For youth ages 15 through 19 and ages 10 through 14, females have had consistently higher reported rates of gonorrhea than males (see Figure HC 2.14.A). In 1996, rates for females ages 15 through 19 were 756.8 per 100,000, versus 394.3 per 100,000 males of the same age.

Differences in Gonorrhea Rates by Race and Hispanic Origin.⁵⁷ Blacks have consistently had the highest reported rates of gonorrhea, frequently more than 10 times the rate of any other race or ethnic group. Rates for blacks have been falling since 1990 for both age groups (for ages 15 through 19, the rate dropped from 6,316.2 in 1990 to 3,063.6 per 100,000 in 1996). Hispanic youth gonorrhea rates have risen and fallen since 1990, the first year for which data by race and ethnicity were available, and 1996 rates for both age groups are at or near 1990 levels (see Table HC 2.14.A).

Decline in Syphilis Rates. Table HC 2.14.B shows that reported rates for primary and secondary syphilis have decreased for youth ages 10 through 14 and 15 through 19, since their peak in 1990. The rate for teens ages 15 through 19 is substantially higher than the rate for youth ages 10 through 14. The reported rate for syphilis in 1996 for ages 15 through 19 was 6.4 cases per 100,000, compared with less than one case per 100,000 for ages 10 through 14.

Higher Syphilis Rates among Females. Females from both age groups have reported more cases of syphilis than their male counterparts (see Figure HC 2.14.B). In 1996, females ages 15 through 19 had a rate of 8.6 cases per 100,000, about double the male rate of 4.3 cases per 100,000.

Differences in Syphilis Rates by Race and Hispanic Origin.⁵⁸ Black youth ages 15 through 19 have rates of syphilis more than 10 times higher than all other racial and ethnic groups throughout the period 1990 through 1996. Rates have been falling for all groups except Native Americans whose reported syphilis rates have fluctuated since 1990 (see Table HC 2.14.B).

⁵⁶Centers for Disease Control and Prevention, Division of STD Prevention, *Sexually Transmitted Disease Surveillance, 1996*. U.S. Department of Health and Human Services, Public Health Service, Atlanta: Centers for Disease Control and Prevention, September 1997, p. 21.

⁵⁷Estimates for whites and blacks exclude Hispanics of those races.

⁵⁸Estimates for whites and blacks exclude Hispanics of those races.

Table HC 2.14.A

Reported rates of youth gonorrhea^a in the United States, by age, gender, and race and Hispanic origin (per 100,000 population): selected years, 1975-1996

	1975	1980	1985	1990	1991	1992	1993	1994 ^b	1995	1996
Ages 10-14										
Total	46.7	48.7	47.7	68.9	64.6	57.8	48.5	48.3	41.3	32.9
Gender										
Male	20.9	23.6	23.8	32.1	32.4	26.2	20.4	15.9	12.4	9.1
Female	73.6	74.8	72.9	107.5	98.3	91.0	78.0	82.3	71.6	57.9
Race and Hispanic origin^{c,d}										
White, non-Hispanic	—	—	—	14.3	12.9	12.1	9.2	10.6	8.9	7.4
Black, non-Hispanic	—	—	—	386.8	364.7	322.4	281.6	276.4	236.7	178.7
Hispanic	—	—	—	15.3	16.5	17.7	20.5	19.0	19.3	16.0
Asian	—	—	—	4.5	9.9	6.2	4.6	6.3	5.6	3.2
Native American	—	—	—	22.7	28.9	19.1	37.2	29.5	19.0	21.5
Ages 15-19										
Total	1,275.1	1,187.3	1,189.9	1,114.4	1,031.4	869.6	728.3	733.7	670.7	570.8
Gender										
Male	1,103.9	953.4	930.5	993.7	954.6	771.0	611.4	585.2	503.1	394.3
Female	1,446.4	1,424.6	1,455.1	1,241.6	1,112.2	973.6	851.6	890.2	847.4	756.8
Race and Hispanic origin^{c,d}										
White, non-Hispanic	—	—	—	230.3	196.7	165.9	136.9	151.0	145.1	129.7
Black, non-Hispanic	—	—	—	6,316.2	5,963.9	4,973.1	4,256.2	4,235.8	3,813.9	3,063.6
Hispanic	—	—	—	268.7	273.1	281.0	264.0	240.3	270.1	246.8
Asian	—	—	—	70.0	91.5	76.7	81.7	84.9	81.0	66.8
Native American	—	—	—	414.6	366.0	319.0	360.4	355.0	296.2	349.9

^aAlthough most areas generally adhere to the case definitions for sexually transmitted diseases (STDs) found in Case Definitions for Public Health Surveillance (*Morbidity and Mortality Weekly Report* 1990; 39: 1-43), there are significant differences between individual areas in case definitions as well as in the policies and systems for collecting surveillance data. In many areas, reporting from publicly supported institutions (e.g., STD clinics) was more complete than from other sources (e.g., private practitioners).

^bFor 1994, Georgia reported gonorrhea cases to CDC for only part of the year; therefore, Georgia cases and population were excluded from gonorrhea figures and tables. In past years, Georgia has been among the states reporting the highest gonorrhea rates.

^cFor the following years, the states/areas listed did not report race/ethnicity for most cases: 1990 (Baltimore, New Jersey, New York City, New York State, and Kentucky); 1991 (Baltimore, New York City, New York State, and Kentucky); 1992 (New York City and New York State); 1993 (New York City, New York State, and Georgia); 1994 (New York City, New York State, and Georgia); 1995 (Georgia, New Jersey, New York City, and New York State); and 1996 (New Jersey, New York City, and New York State). Massachusetts did not report age for most cases in 1990. Cases and population denominators have been excluded for these states/areas for the appropriate years.

^dEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1975 from Centers for Disease Control and Prevention, Division of STD Prevention. *STD Statistics* (No. 135), 1986, Table 7; Data for 1980 and 1985 from Centers for Disease Control and Prevention, Division of STD Prevention. *STD Statistics* (No. 136), 1987, Table 3; Data for 1990-1992 from Division of STD/HIV Prevention. *Sexually Transmitted Disease Surveillance*, 1993. U.S. Department of Health and Human Services, Public Health Service. Atlanta: Centers for Disease Control and Prevention, December 1994, Table 9.B; Data for 1993-1996 from Division of STD Prevention. *Sexually Transmitted Disease Surveillance*, 1996. U.S. Department of Health and Human Services, Public Health Service. Atlanta: Centers for Disease Control and Prevention, 1997, Table 12.B.

Table HC 2.14.B

Reported rates of youth primary and secondary syphilis^a in the United States, by age, gender, and race and Hispanic origin (per 100,000 population): selected years, 1975-1996

	1975	1980	1985	1990	1991 ^b	1992	1993 ^b	1994	1995	1996 ^b
Ages 10-14										
Total	1.1	0.9	0.9	1.8	1.4	1.3	0.9	0.6	0.6	0.3
Gender										
Male	0.7	0.5	0.5	0.5	0.4	0.3	0.3	0.1	0.1	0.1
Female	1.5	1.3	1.4	3.2	2.5	2.3	1.6	1.2	1.0	0.5
Race and Hispanic origin^c										
White, non-Hispanic	---	---	---	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Black, non-Hispanic	---	---	---	10.6	8.6	8.1	5.9	3.8	3.5	1.6
Hispanic	---	---	---	1.1	0.4	0.4	0.1	0.1	0.1	0.1
Asian	---	---	---	0.2	0.3	0.0	0.2	0.0	0.0	0.0
Native American	---	---	---	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Ages 15-19										
Total	17.8	17.2	17.0	29.8	27.8	22.5	17.0	12.7	10.1	6.4
Gender										
Male	18.0	19.2	16.3	20.9	19.1	15.5	10.8	8.3	6.6	4.3
Female	17.5	15.1	17.7	39.2	37.0	29.9	23.5	17.3	13.8	8.6
Race and Hispanic origin^c										
White, non-Hispanic	---	---	---	2.9	2.6	2.0	1.6	1.4	1.1	0.9
Black, non-Hispanic	---	---	---	174.6	164.8	136.7	103.5	76.5	60.9	36.9
Hispanic	---	---	---	15.2	12.5	8.5	5.6	2.8	2.4	1.9
Asian	---	---	---	1.7	1.9	1.4	1.0	0.8	0.5	0.8
Native American	---	---	---	2.8	7.0	2.7	0.6	2.4	4.2	1.2

^aAlthough most areas generally adhere to the case definitions for sexually transmitted diseases (STDs) found in Case Definitions for Public Health Surveillance (*Morbidity and Mortality Weekly Report* 1990; 39: 1-43), there are significant differences between individual areas in case definitions as well as in the policies and systems for collecting surveillance data. In many areas reporting from publicly supported institutions (e.g., STD clinics) was more complete than from other sources (e.g., private practitioners).

^bFor the indicated states/areas, cases and population denominators have been excluded for the years indicated: 1991 (Kentucky, as race/ethnicity was not reported for most cases); 1993 (Baltimore, Maryland, because age was not reported for most cases); 1996 (Rhode Island, because race/ethnicity was not reported for most cases).

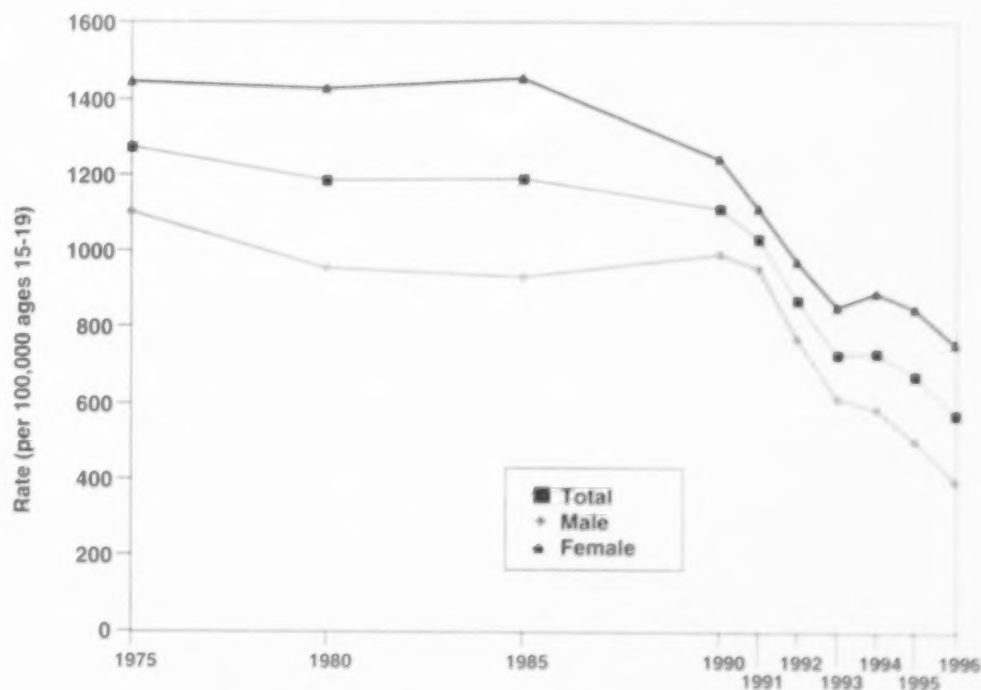
^cEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1975 from Centers for Disease Control and Prevention, Division of STD Prevention. *STD Statistics* (No. 135), 1986, Table 8; Data for 1980 and 1985 from Centers for Disease Control and Prevention, Division of STD Prevention. *STD Statistics* (No. 136), 1987, Table 2; Data for 1990-1992: Division of STD/HIV Prevention. *Sexually Transmitted Disease Surveillance*, 1993. U.S. Department of Health and Human Services, Public Health Service. Atlanta; Centers for Disease Control and Prevention, December 1994, Table 21.B; Data for 1993-1996: Division of STD Prevention. *Sexually Transmitted Disease Surveillance*, 1996. U.S. Department of Health and Human Services, Public Health Service. Atlanta; Centers for Disease Control and Prevention, 1997, Table 24.B.

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Figure HC 2.14.A

Reported rates of gonorrhea^a for youth ages 15 through 19 in the United States, by gender (per 100,000 population ages 15 through 19): selected years, 1975-1996

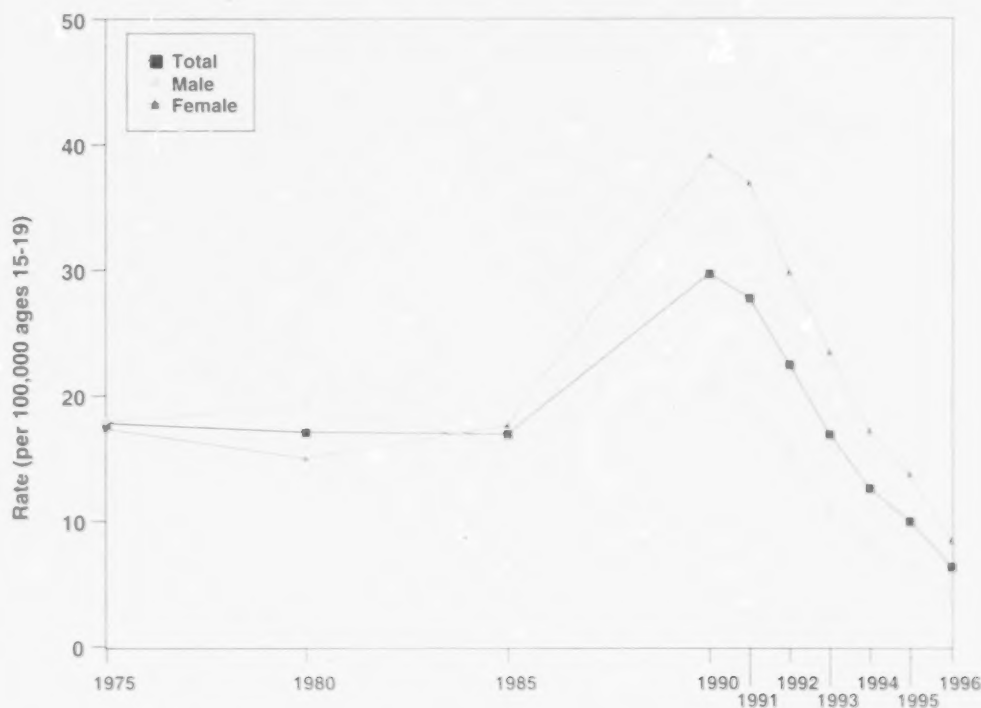


^aAlthough most areas generally adhere to the case definitions for sexually transmitted diseases (STDs) found in Case Definitions for Public Health Surveillance (*Morbidity and Mortality Weekly Report* 1990; 39: 1-43), there are significant differences between individual areas in case definitions as well as in the policies and systems for collecting surveillance data. In many areas, reporting from publicly supported institutions (e.g., STD clinics) was more complete than from other sources (e.g., private practitioners).

Sources: Data for 1975 from Centers for Disease Control and Prevention, Division of STD Prevention. *STD Statistics* (No. 135), 1986, Table 7; Data for 1980 and 1985 from Centers for Disease Control and Prevention, Division of STD Prevention. *STD Statistics* (No. 136), 1987, Table 3; Data for 1990-1992 from Division of STD-HIV Prevention. *Sexually Transmitted Disease Surveillance, 1993*. U.S. Department of Health and Human Services, Public Health Service. Atlanta: Centers for Disease Control and Prevention, December 1994, Table 9.B; Data for 1993-1996 from Division of STD Prevention. *Sexually Transmitted Disease Surveillance, 1996*. U.S. Department of Health and Human Services, Public Health Service. Atlanta: Centers for Disease Control and Prevention, 1997, Table 12.B.

Figure HC 2.14.B

Reported rates of primary and secondary syphilis^a for youth ages 15 through 19 in the United States, by gender (per 100,000 population ages 15 through 19): selected years, 1975-1996



^aAlthough most areas generally adhere to the case definitions for sexually transmitted diseases (STDs) found in Case Definitions for Public Health Surveillance (*Morbidity and Mortality Weekly Report* 1990; 39: 1-43), there are significant differences between individual areas in case definitions as well as in the policies and systems for collecting surveillance data. In many areas, reporting from publicly supported institutions (e.g., STD clinics) was more complete than from other sources (e.g., private practitioners).

Sources: Data for 1975 from Centers for Disease Control and Prevention, Division of STD Prevention. *STD Statistics* (No. 135), 1986, Table 8; Data for 1980 and 1985 from Centers for Disease Control and Prevention, Division of STD Prevention. *STD Statistics* (No. 136), 1987, Table 2; Data for 1990-1992: Division of STD/HIV Prevention. *Sexually Transmitted Disease Surveillance*, 1993. U.S. Department of Health and Human Services, Public Health Service. Atlanta: Centers for Disease Control and Prevention, December 1994, Table 21.B; Data for 1993-1996: Division of STD Prevention. *Sexually Transmitted Disease Surveillance*, 1996. U.S. Department of Health and Human Services, Public Health Service. Atlanta: Centers for Disease Control and Prevention, 1997, Table 24.B.

HC 3.1

HEALTH INSURANCE COVERAGE

Children who are covered by health insurance are considerably more likely to have a regular source of health care. Among children covered by private health insurance, 97 percent had a regular source of medical care in 1993; and of those covered by public health insurance, 94 percent had a regular source of medical care. In contrast, 79 percent of children with no health insurance had a regular source of medical care.⁵⁹ Regular care increases the continuity of care, which is important to the maintenance of good health.

Since 1987, the percentage of children who are covered by health insurance has remained stable, ranging from 85 to 87 percent (see Table HC 3.1.A). Rates of coverage vary little by age of child, though older children appear slightly less likely to be covered.

Differences by Race and Hispanic Origin. Hispanic children are less likely to be covered than either white or black children. In 1996, 71 percent of Hispanic children were covered by health insurance, compared with 86 percent of white children and 81 percent of black children (see Table HC 3.1.A).

Differences by Type of Health Care Coverage. Public health insurance coverage for children increased from 19 percent in 1987 to a high of 27 percent in 1993, before declining slightly to 25 percent by 1996 (see Figure HC 3.1).⁶⁰ Younger children are considerably more likely to be covered by public health insurance. In 1996, 31 percent of children under age 6 were covered, compared with 19 percent of children ages 12 through 17 (see Table HC 3.1.A). Finally, a very large proportion of black and Hispanic children rely on public health insurance for their medical coverage. In 1996, 45 percent of black and 35 percent of Hispanic children were covered by public health insurance, compared with 21 percent of white children. The vast majority of children covered by public health insurance are covered by Medicaid (see Table 3.1.B).

⁵⁹Simpson G., Bloom B., Cohen R.A., and Parsons P.E. "Access to Health Care: Part 1: Children." *Vital and Health Statistics* 10(196). National Center for Health Statistics, 1997.

⁶⁰Public health insurance for children consists primarily of Medicaid but also includes Medicare and CHAMPUS.

Table HC 3.1.A

Percentage of children under age 18 in the United States who are covered by health insurance, by type of insurance, age, and race and Hispanic origin:^a 1987-1996

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
All health insurance										
All children	87	87	87	87	87	87	86	86	86	85
Under age 6	88	87	87	89	89	89	88	86	87	86
Ages 6-11	87	87	87	87	88	88	87	87	87	85
Ages 12-17	86	86	86	85	85	85	83	85	86	84
Race and Hispanic origin^b										
White	88	88	88	87	88	88	87	87	87	86
Black	83	84	84	85	85	86	84	83	85	81
Hispanic	72	71	70	72	73	75	74	72	73	71
Private health insurance										
All children	74	74	74	71	70	69	67	66	66	66
Under age 6	72	71	71	68	66	65	63	60	60	62
Ages 6-11	74	74	75	73	71	71	70	67	67	67
Ages 12-17	75	76	76	73	72	71	69	70	71	70
Race and Hispanic origin^b										
White	79	79	78	76	75	74	72	71	71	71
Black	49	50	52	49	45	46	46	43	44	45
Hispanic	48	48	48	45	43	42	42	38	38	40
Public health insurance^b										
All children	19	19	19	22	24	25	27	26	26	25
Under age 6	22	23	24	28	30	33	35	33	33	31
Ages 6-11	19	18	18	20	22	23	25	25	26	25
Ages 12-17	16	16	15	18	19	19	20	20	21	19
Race and Hispanic origin^b										
White	14	14	15	17	19	20	22	21	21	21
Black	42	42	41	45	48	49	50	48	49	45
Hispanic	28	27	27	32	37	38	41	38	39	35

^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

^bPublic health insurance for children consists primarily of Medicaid, but also includes Medicare and CHAMPUS.

Source: Unpublished tables, based on Analyses from the March Current Population Surveys. Housing and Household Economic Statistics Division, U.S. Bureau of the Census.

Table HC 3.1.B

Percentage of children under age 18 in the United States who are covered by Medicaid, by age, and by race and Hispanic origin:^a 1987-1996

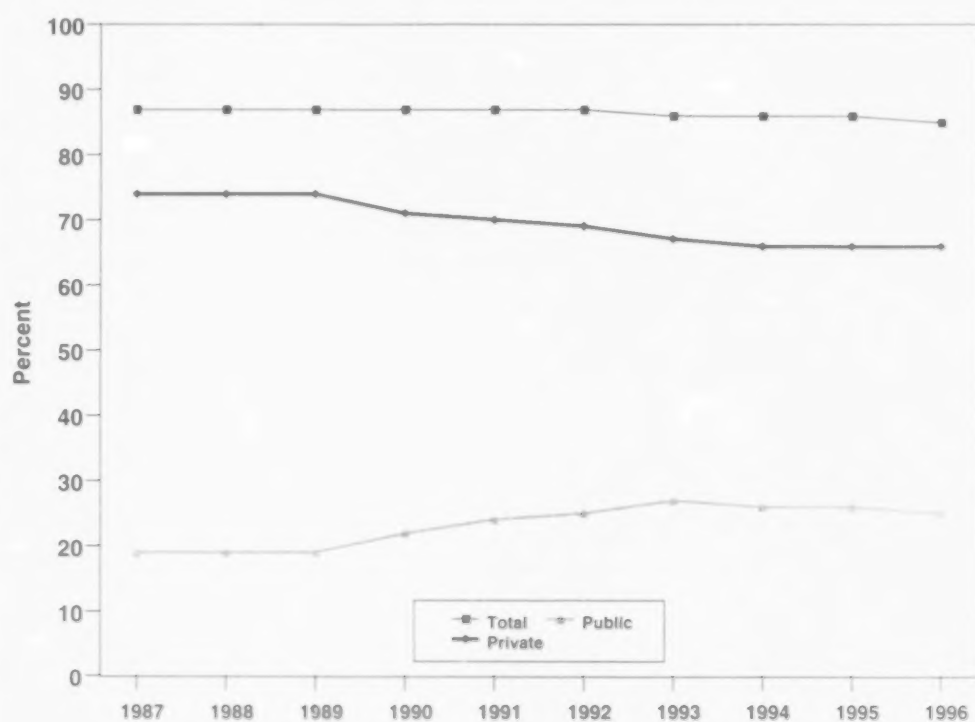
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
All children	15	16	16	19	20	22	24	23	23	22
Under age 6	18	19	20	24	27	30	32	30	30	28
Ages 6-11	15	15	15	17	19	20	22	22	23	22
Ages 12-17	12	12	11	14	15	15	17	16	17	16
Race and Hispanic origin^a										
White	11	11	11	14	16	17	19	18	18	18
Black	38	38	37	42	44	46	47	44	45	41
Hispanic	26	25	25	30	34	37	39	37	37	34

^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

Source: Unpublished tables, based on Analyses from the March Current Population Surveys. Housing and Household Economic Statistics Division, U.S. Bureau of the Census.

Figure HC 3.1

Percentage of children under age 18 in the United States who are covered by health insurance, by type of insurance:^a 1987-1996



^aPublic health insurance for children consists primarily of Medicaid, but also includes Medicare and CHAMPUS.

Source: Unpublished tables, based on Analyses from the March Current Population Surveys. Housing and Household Economic Statistics Division, U.S. Bureau of the Census.

HC 3.2

EARLY PRENATAL CARE: RECEIPT OF PRENATAL CARE IN THE FIRST TRIMESTER

Early prenatal care (i.e., care in the first trimester of a pregnancy) allows women and their health care providers to identify and, when possible, treat or correct health problems and health-compromising behaviors that can be particularly damaging during the initial stages of fetal development. Increasing the percentage of women who receive prenatal care, and who do so early in their pregnancies, can improve birth outcomes and lower health care costs by reducing the likelihood of complications during pregnancy and childbirth.⁶¹

The percentage of women receiving prenatal care in the first trimester has increased from 68.0 percent in 1970 to 81.8 percent in 1996 (see Table HC 3.2).⁶² Following a decade of essentially no change, the proportion of women receiving early prenatal care has improved incrementally throughout the 1990s.

Differences by Race and Ethnicity. The percentage of women receiving prenatal care during the first three months of pregnancy has increased over the past two decades for women of all races and those of Hispanic origin.⁶³ While the gains have been greatest for black, American Indian/Alaskan Native and Hispanic women, white women and Asian/Pacific Islander women are most likely to receive prenatal care in their first trimester (see Table HC 3.2 and Figure HC 3.2).

- American Indian/Alaskan Native women have consistently had the lowest percentage of women receiving early prenatal care; however, this percentage has increased gradually, from 38.2 percent in 1970 to 66.7 percent by 1995 (the latest year for which data are available for this group).
- The percentage of black women receiving prenatal care in the first trimester increased from 44.2 percent in 1970 to 62.4 percent in 1980. Rates declined slightly to 60.6 percent in 1990 but continued to increase in subsequent years, reaching 71.3 percent by 1996.
- The percentage of Hispanic women who receive early prenatal care has increased from 60.2 percent in 1980 to 71.9 percent by 1996. Among Hispanics, there are important subgroup disparities. In 1995, 89.2 percent of Cuban women received early prenatal care, compared with 69.1 percent of Mexican American women.
- Since 1980, there has been a gradual increase of nearly 6 percentage points in early prenatal care receipt among Asian/Pacific Islander women — from 73.7 percent in 1980 to 79.9 percent in 1995 (the latest year for which data are available for this group). Chinese, Japanese, and Filipino women tend to have higher rates of prenatal care among all Asian women, compared with Hawaiian and other Asian women.
- The percentage of white women receiving early prenatal care increased from 72.4 percent to 79.2 percent between 1970 and 1980, was stable through the 1980s, then increased during the 1990s to 83.9 percent by 1996.

Differences by Age. Older women are more likely to receive early prenatal care than are younger women. Although there have been improvements in the receipt of early prenatal care by teenagers, this age group is consistently the least likely to receive prenatal care in the first trimester of pregnancy (see Table HC 3.2).

- Receipt of early prenatal care among women under age 15 improved considerably between 1975 and 1996, increasing from 30.9 percent to 47.2 percent.

⁶¹U.S. Public Health Service. "Caring for Our Future: The Content of Prenatal Care." Washington, DC: U.S. Department of Health and Human Services, 1989.

⁶²Data for 1996 are preliminary.

⁶³These data include only those women who gave birth, not all women who were pregnant.

- The percentage of women age 35 and over who received early prenatal care also improved during this time period, increasing from 68.4 percent in 1975 to 87.0 percent by 1996.
- More than 80 percent of women age 25 and older received early prenatal care throughout the 1990s.

Table HC 3.2

Percentage of women^a in the United States receiving prenatal care in the first trimester, by race/ethnicity of mother and by age: selected years, 1970-1996^b

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^c
Total	68.0	72.4	76.3	76.2	75.8	76.2	77.7	78.9	80.2	81.3	81.8
Race/ethnicity											
White	72.4	75.8	79.2	79.3	79.2	79.5	80.8	81.8	82.8	83.6	83.9
Black	44.2	55.5	62.4	61.5	60.6	61.9	63.9	66.0	68.3	70.4	71.3
American Indian/Alaskan Native	38.2	45.4	55.8	57.5	57.9	59.9	62.1	63.4	65.2	66.7	—
Asian/Pacific Islander											
Chinese	—	—	73.7	74.1	75.1	75.3	76.6	77.6	79.7	79.9	—
Japanese	71.8	76.7	82.6	82.0	81.3	82.3	83.8	84.6	86.2	85.7	—
Filipino	78.1	82.7	86.1	84.7	87.0	87.3	88.2	87.2	89.2	89.7	—
Hawaiian and part Hawaiian	60.6	70.6	77.3	76.5	77.1	77.1	78.7	79.3	81.3	80.9	—
Other Asian or Pacific Islander	—	—	—	65.8	68.1	69.9	70.6	77.0	75.9	—	—
Hispanic origin^d											
Mexican American	—	—	60.2	61.2	60.2	61.0	64.2	66.6	68.9	70.8	71.9
Puerto Rican	—	—	59.6	60.0	57.8	58.2	62.1	64.8	67.3	69.1	—
Cuban	—	—	55.1	58.3	63.5	65.0	67.8	70.0	71.7	74.0	—
Central and South American	—	—	82.7	82.5	84.8	85.4	86.8	88.9	90.1	89.2	—
Other and Unknown Hispanic	—	—	58.8	60.6	61.5	63.4	66.8	68.7	71.2	73.2	—
Age											
Under age 15	—	—	86.4	85.8	86.4	85.6	88.0	70.0	72.1	74.3	—
15-19 years	—	80.9	84.3	86.0	87.9	88.3	89.8	91.9	94.3	96.3	96.9
20-24 years	—	73.4	74.9	71.7	68.9	69.5	71.2	72.8	74.6	76.0	76.5
25-29 years	—	81.5	84.0	83.1	81.7	81.9	82.9	83.6	84.5	85.2	85.5
30-34 years	—	78.9	84.4	85.5	85.3	85.4	86.4	86.9	87.7	88.2	88.5
35 years and older	—	68.4	76.1	81.3	83.4	83.8	84.6	85.3	86.2	86.7	87.0

^aThe data refer to those women who had live births.

^bData for 1996 are preliminary.

^cIncludes persons of Hispanic origin.

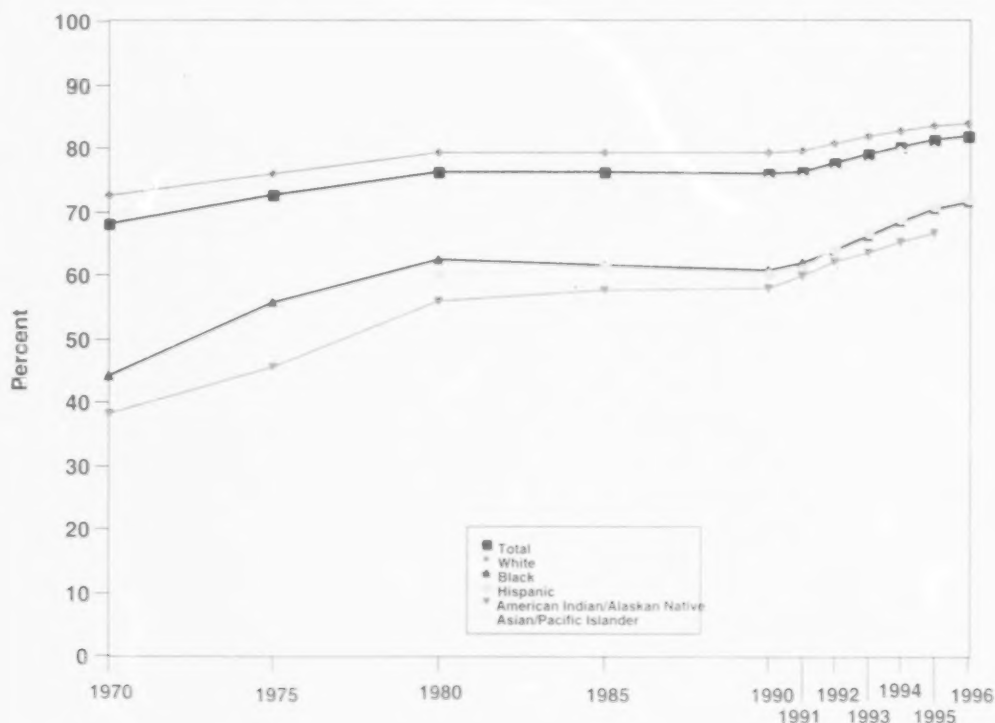
^dPersons of Hispanic origin may be of any race.

^eFigures for Hispanic women in 1980 are based on data from 22 states that reported Hispanic origin on the birth certificate; 23 states and the District of Columbia in 1985, 48 states and the District of Columbia in 1990, 49 states and the District of Columbia in 1992, and 50 states and the District of Columbia since 1993.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data compiled by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46(1, Supp. 2): Hyattsville, Md.: National Center for Health Statistics, 1997. *Monthly Vital Statistics Report* 46(1, Supp. 2).
 Report of Final Natality Statistics, 1995. *Monthly Vital Statistics Report* 45(11, Supp. 2): Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

Figure HC 3.2

Percentage of women^a in the United States receiving prenatal care in the first trimester, by race/ethnicity^b of mother: selected years, 1970-1996^c



^aThe data refer to those women who had live births.

^bEstimates for all race groups include Hispanics of those races. Persons of Hispanic origin may be of any race. Figures for Hispanic women in 1980 are based on data from 22 states that reported Hispanic origin on the birth certificate; 23 states and the District of Columbia in 1985, 48 states and the District of Columbia in 1990, 49 states and the District of Columbia in 1992, and 50 states and the District of Columbia since 1993.

^cData for 1996 are preliminary.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46(1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. Report of Final Natality Statistics, 1995. *Monthly Vital Statistics Report* 45(11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

HC 3.3

LATE OR NO PRENATAL CARE

Receiving prenatal care late in a pregnancy, or receiving no prenatal care at all, can lead to negative health outcomes for mother and child. Women who receive care late in their pregnancy, or who do not receive care at all, are at increased risk of bearing infants who are of low birth weight, who are stillborn, or who die within the first year of life.⁶⁴ Between 1970 and 1996, the percentage of women receiving late or no prenatal care declined from 7.9 percent to 4.1 percent (see Figure HC 3.3).⁶⁵

Differences by Race and Ethnicity. The percentage of women who receive late or no prenatal care has declined substantially for women in all race and ethnic groups. The descriptions that follow present 1995 data which are available for all race groups and Hispanic origins. Preliminary data for 1996 are available for white, black, and Hispanic women, as shown in Table HC 3.3:

- American Indian/Alaskan Native women and black women have seen the most dramatic improvements, with the percentages receiving late or no prenatal care dropping by more than two-thirds for American Indian women and by more than half for black women since 1970. In 1995, 9.5 percent of American Indian women received late or no prenatal care, and 7.6 percent of black women received late or no prenatal care.
- The percentage of Hispanic women receiving late or no prenatal care has decreased every year during the 1990s, and at 7.4 percent in 1995 was lower than the rate for black women.
- White women and Asian women have consistently been least likely to receive late or no prenatal care. In 1995, 3.5 percent of white women received late or no prenatal care and 4.3 percent of Asian women received late or no prenatal care.

Differences by Age. In general, as the age of a woman increases, the likelihood of receiving late or no prenatal care decreases. The percentage of women age 15 and younger who received late or no prenatal care is double that of women ages 15 through 19 and three to five times greater than women age 20 and older, as reflected in 1996 preliminary data. Although their rates remain much higher than any other age group, the percentage of women age 15 and under who received late or no prenatal care has improved substantially since 1975, decreasing from 21.1 percent to 15.5 percent by 1996. Percentages among women ages 15 through 19 have also improved over this time period, decreasing to 7.4 percent in 1996. Less than four percent of women in each age group 25 and over received late or no prenatal care during pregnancy in 1996, especially women ages 30 through 34 whose rate of late or no prenatal care reached a new low of 2.6 percent (see Table HC 3.3).

⁶⁴U.S. Public Health Service. "Caring for Our Future: The Content of Prenatal Care." Washington, D.C.: U.S. Department of Health and Human Services, 1989.

⁶⁵Data for 1996 are preliminary.

Table HC 3.3

Percentage of women^a in the United States receiving late or no prenatal care,^b by race/ethnicity of mother and by age: selected years, 1970-1996^c

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^d
Total	7.9	6.0	5.1	5.7	6.1	5.8	5.2	4.8	4.4	4.2	4.1
Race/ethnicity											
White ^e	6.3	5.0	4.3	4.8	4.9	4.7	4.2	3.9	3.6	3.5	3.4
Black ^e	16.6	10.5	8.9	10.2	11.3	10.7	9.9	9.0	8.2	7.6	7.4
American Indian/Alaskan Native ^f	28.9	22.4	15.2	12.9	12.9	12.2	11.0	10.3	9.8	9.5	—
Asian/Pacific Islander ^g	—	—	6.5	6.5	5.8	5.7	4.9	4.6	4.1	4.3	—
Chinese	6.5	4.4	3.7	4.4	3.4	3.4	2.9	2.9	2.7	3.0	—
Japanese	4.1	2.7	2.1	3.1	2.9	2.5	2.4	2.8	1.9	2.3	—
Filipino	7.2	4.1	4.0	4.8	4.5	5.0	4.3	4.0	3.6	4.1	—
Hawaiian and part Hawaiian	—	—	—	—	8.7	7.5	7.0	6.7	4.7	5.1	—
Other Asian or Pacific Islander	—	—	—	—	7.1	6.8	5.9	5.4	4.8	5.0	—
Hispanic origin ^{h,i}	—	—	12.0	12.4	12.0	11.0	9.5	8.8	7.6	7.4	6.8
Mexican American	—	—	11.8	12.9	13.2	12.2	10.5	9.7	8.3	8.1	—
Puerto Rican	—	—	16.2	15.5	10.6	9.1	8.0	7.1	6.5	5.5	—
Cuban	—	—	3.9	3.7	2.8	2.4	2.1	1.8	1.6	2.1	—
Central and South American	—	—	13.1	12.5	10.9	9.5	7.9	7.3	6.5	6.1	—
Other and Unknown Hispanic	—	—	9.2	9.4	8.5	8.2	7.5	7.0	6.2	6.0	—
Age											
Under age 15	—	21.1	20.0	20.5	20.3	18.8	17.2	16.6	15.9	15.3	15.5
15-19 years	—	10.8	10.3	12.0	11.9	10.9	9.7	8.9	8.0	7.6	7.4
20-24 years	—	5.8	5.4	6.9	8.0	7.5	6.7	6.2	5.6	5.4	5.2
25-29 years	—	3.6	3.1	3.8	4.4	4.3	3.9	3.7	3.4	3.3	3.2
30-34 years	—	4.3	3.0	3.1	3.4	3.3	3.0	2.9	2.7	2.7	2.6
35 years and older	—	7.5	5.4	4.5	4.1	3.9	3.6	3.4	3.1	3.1	3.0

^aThe data refer to those women who had live births.

^bLate prenatal care is defined as 7th month or later.

^cData for 1996 are preliminary.

^dIncludes persons of Hispanic origin.

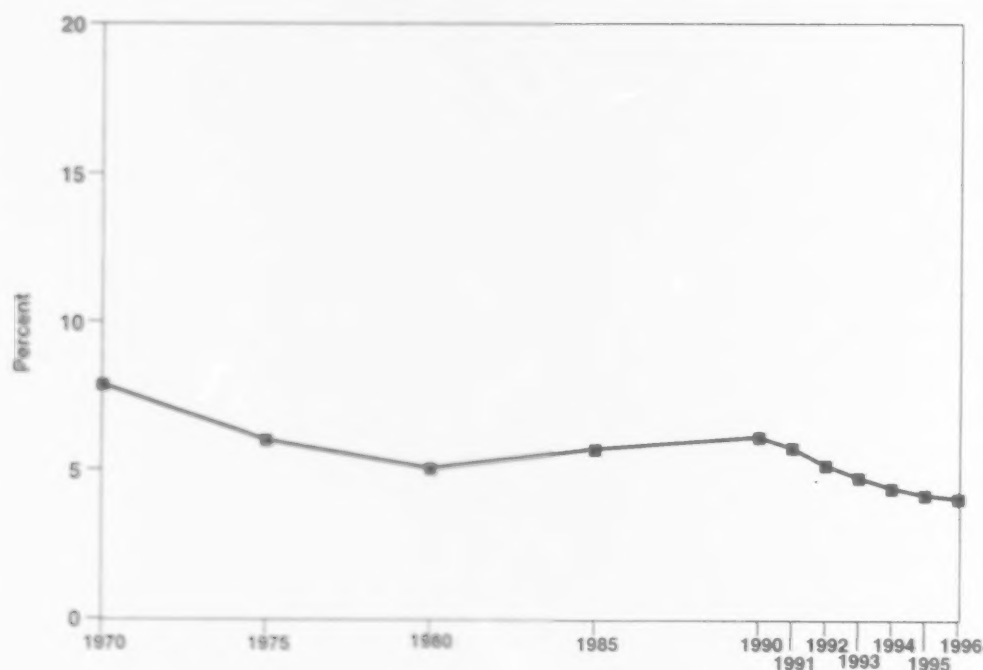
^ePersons of Hispanic origin may be of any race.

^fFigures for Hispanic women in 1980 are based on data from 22 states that reported Hispanic origin on the birth certificate, 23 states and the District of Columbia in 1985, 48 states and the District of Columbia in 1990, 49 states and the District of Columbia in 1992, and 50 states and the District of Columbia since 1993.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46(1, Supp. 2): Hyattsville, Md.: National Center for Health Statistics, 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45(11, Supp. 2): Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

Figure HC 3.3

Percentage of women^a in the United States receiving late or no prenatal care:^b selected years, 1970-1996^c



^aThe data refer to those women who had live births.

^bLate prenatal care is defined as 7th month or later.

^cData for 1996 are preliminary.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46(1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45(11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

HC 3.5

IMMUNIZATION: PERCENTAGE OF CHILDREN AGES 19 MONTHS TO 35 MONTHS WHO ARE FULLY IMMUNIZED

Childhood vaccinations can prevent diseases that killed or permanently impaired many children in past decades. The Centers for Disease Control and Prevention recommend that 80 percent of all routine childhood vaccinations be administered within the first two years of life. Vaccination coverage is particularly important before children enter preschool to prevent the spread of disease. Today, at least 95 percent of children are adequately vaccinated by the time they enter kindergarten.⁶⁶

There were substantial increases in the proportion of children vaccinated between 1991 and 1994 for each of the recommended vaccines (data not shown).⁶⁷ Coverage has continued to increase during the period from 1994 to 1996. For example, the percentage of pre-school children receiving the combined series 4:3:1:3 vaccine was 69 percent in 1994 and reached 77 percent by 1996.⁶⁸ Even with the increases of recent years, more than one million preschool children remain unvaccinated for serious preventable diseases.⁶⁹ In particular, there are differences in immunization rates by poverty status and race and Hispanic origin.

Differences by Poverty Status. Children in households at or above the poverty level are more likely to have received each of the vaccinations specified in each year from 1994 to 1996 than are children in households below the poverty level. In 1996, 80 percent of children in families at or above the poverty level received the combined series (4:3:1:3), compared with 69 percent of poor children (see Table HC 3.5).

Differences by Race and Hispanic Origin.⁷⁰ Non-Hispanic white infants ages 19 months to 35 months have higher percentages of vaccination receipt than do non-Hispanic black children or children of Hispanic origin. This disparity in vaccination levels has narrowed somewhat from 1994 to 1996, as the vaccination levels of black and Hispanic children have improved. By preschool, the vaccination levels of children across race and ethnic groups are nearly the same, narrowing a gap that once was as wide as 26 percentage points for specific vaccinations.⁷¹

⁶⁶Office of Communication, Division of Media Relations, Centers for Disease Control and Prevention. Facts About the Childhood Immunization Initiative. 1997.

⁶⁷Based on data from the National Immunization Program, Center for Prevention Services, from data compiled by the Division of Health Interview Statistics as reported in National Center for Health Statistics. *Health, United States, 1996-97*. Hyattsville, Md.: 1997.

⁶⁸The combined series 4:3:1:3 consists of four doses of Diphtheria-tetanus-pertussis (DTP) vaccine, three doses of polio vaccine, one dose of measles-containing vaccine, and three doses of Haemophilus influenzae type b (HiB) vaccine.

⁶⁹Office of Communication, Division of Media Relations, Centers for Disease Control and Prevention. Facts About the Childhood Immunization Initiative. 1997.

⁷⁰Estimates for whites and blacks exclude Hispanics of those races.

⁷¹Vaccination Levels for Minority Children in the U.S. at All-time High." U.S. Department of Health and Human Services Press Release. October 16, 1997.

Table HC 3.5

Percentage of children^a ages 19 months to 35 months in the United States who have received vaccinations for routinely recommended vaccines, by poverty status,^b and race and Hispanic origin:^c 1994^d-1996

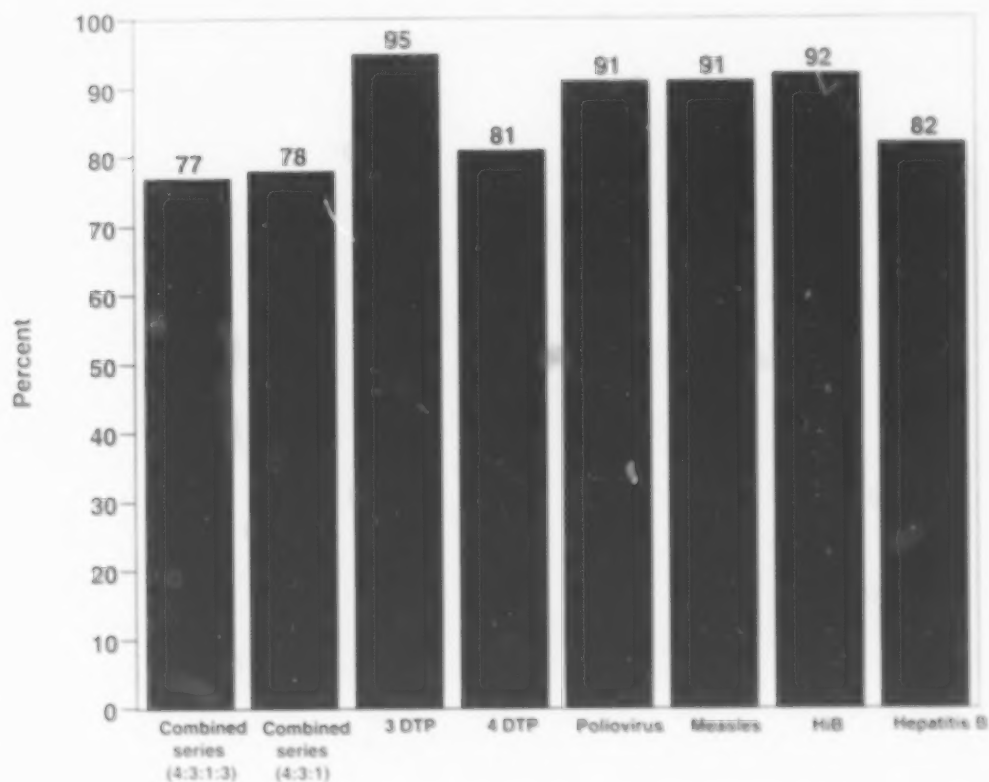
Vaccination type		Total	Poverty Status ^b		Race and Hispanic Origin ^c		
			Below poverty	At or above poverty	White, non-Hispanic	Black, non-Hispanic	Hispanic
Combined series (4:3:1:3) ^e	1994	69	61	72	72	66	62
	1995	74	66	77	77	70	68
	1996	77	69	80	79	74	71
Combined series (4:3:1) ^f	1994	75	66	78	78	69	68
	1995	76	68	79	79	72	71
	1996	78	71	81	80	76	73
DTP (3 doses or more) ^g	1994	93	89	96	95	91	90
	1995	95	91	96	96	92	93
	1996	95	92	96	96	93	93
DTP (4 doses or more) ^g	1994	77	68	80	80	71	71
	1995	79	71	81	81	74	74
	1996	81	73	84	83	79	77
Polio (3 doses or more) ^h	1994	83	77	86	85	79	82
	1995	88	84	89	89	84	86
	1996	91	88	92	92	90	89
Measles-containing ⁱ	1994	89	87	90	90	85	88
	1995	90	85	91	91	87	88
	1996	91	87	92	92	89	88
HiB (3 doses or more) ^j	1994	86	81	88	87	84	83
	1995	92	88	93	93	89	89
	1996	92	88	93	93	90	89
Hepatitis B (3 doses or more) ^k	1994	36	24	41	40	30	31
	1995	68	64	69	68	65	70
	1996	82	78	83	82	82	80

^aData are based on household interviews of a sample of the civilian, noninstitutionalized population. Refusals and unknowns were excluded. Exclusions included unknown vaccine type. - ^bPoverty status is based on family income and family size using U.S. Bureau of the Census poverty thresholds. - ^cEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race. - ^dEstimates are based on interviews conducted from April 1994 through December 1994. - ^eThe combined series 4:3:1:3 consists of four doses of Diphtheria-tetanus-pertussis (DTP) vaccine, three doses of polio vaccine, one dose of a measles-containing vaccine, and three doses of Haemophilus influenzae type b (HiB) vaccine. - ^fThe combined series 4:3:1 consists of four doses of DTP vaccine, three doses of polio vaccine, and one dose of a measles-containing vaccine. - ^gDiphtheria-tetanus-pertussis vaccine. - ^hAny vaccination containing measles vaccine. - ⁱHaemophilus influenzae type b vaccine. - ^jThe percentage of children 19-35 months of age who received three or more doses of Hepatitis B vaccine was artificially low in 1994 because universal infant vaccination with a 3-dose series was not recommended until November 1991.

Sources: National Center for Health Statistics. *Health, United States, 1996-97*. Hyattsville, Md.: 1997 (table 55). Based on data from the National Immunization Survey, National Center for Health Statistics and National Immunization Program, Centers for Disease Control and Prevention; Estimates for 1996 from Centers for Disease Control and Prevention. October 17, 1997. "Vaccination Coverage by Race/Ethnicity and Poverty Level Among Children Aged 19-35 Months--United States, 1996." *Morbidity and Mortality Weekly Report* 46:41.

Figure HC 3.5

Percentage of children^a ages 19 months to 35 months in the United States who have received vaccinations for routinely recommended vaccines:^b 1996



^aData are based on household interviews of a sample of the civilian, noninstitutionalized population. Refusals and unknowns were excluded. Exclusions included unknown vaccine type.

^bThe combined series 4:3:1:3 consists of four doses of Diphtheria-tetanus-pertussis (DTP) vaccine, three doses of polio vaccine, one dose of a measles-containing vaccine, and three doses of *Haemophilus influenzae* type b (Hib) vaccine. The combined series 4:3:1 consists of four doses of DTP vaccine, three doses of polio vaccine, and one dose of a measles-containing vaccine.

Sources: National Center for Health Statistics, *Health, United States, 1996* (C. Hyattsville, MD, 1997) (table 55). Based on data from the National Immunization Survey, National Center for Health Statistics and National Immunization Program, Centers for Disease Control and Prevention. Estimates for 1996 from Centers for Disease Control and Prevention, October 17, 1997. "Vaccination Coverage by Race/Ethnicity and Poverty Level Among Children Aged 19-35 Months—United States, 1996." *Morbidity and Mortality Weekly Report* 46(41).



Social Development, Behavioral Health, and Teen Fertility

SD 1.1

LIFE GOALS: THE PERCENTAGE OF HIGH SCHOOL SENIORS WHO RATED SELECTED PERSONAL AND SOCIAL GOALS AS EXTREMELY IMPORTANT

The personal and social life goals of high school students reflect their priorities for the future and provide insights into the positive and negative influences in their lives as they make the transition to adulthood. The percentages of high school seniors who rated selected personal and social life goals as extremely important for selected years between 1976 and 1996 are presented in Tables SD 1.1.A and SD 1.1.B. Personal goals include being successful in their line of work, having a good marriage and family life, and having lots of money. Social goals include making a contribution to society, working to correct social and economic inequalities, and being a leader in their community.

From 1976 through 1996, high school seniors have been fairly consistent in the relative importance they assign to various life goals. Specifically:

- **Having a Good Marriage and Family Life and Being Successful in My Line of Work** have been cited most often by high school seniors as being extremely important. Since 1992, nearly four out of five high school seniors have felt it extremely important to have a good marriage and family life, and nearly two out of three felt it extremely important to be successful at work (see Table SD 1.1.A).
- **Having Lots of Money and Making a Contribution to Society** were the next most likely goals to be considered extremely important by high school seniors. Between 20 and 30 percent of seniors found these goals extremely important in recent years (see Figures SD 1.1.A and SD 1.1.B).
- **Working to Correct Social and Economic Inequalities and Being a Leader in my Community** are important goals in 1996 for only small percentages of high school seniors: 12 percent and 15 percent, respectively (see Figure SD 1.1.B).

Differences by Race. In 1996, black students were more likely than whites to view as extremely important goals such as being successful at work (74 percent versus 63 percent), having lots of money (43 percent versus 21 percent), and correcting social and economic inequalities (19 percent versus 9 percent). The two groups appeared equally likely to attach extreme importance to having a good marriage and family life, a rate that has hovered around 75 percent for both races over the time period examined.

Differences by Gender. Across the six goals, rates vary little between male students and female students, with several exceptions. In 1996, females were more likely to indicate that having a good marriage and family life was extremely important (81 percent versus 74 percent), and were less likely to report that having lots of money was an extremely important goal (16 percent versus 33 percent).

Table SD 1.1.A

Percentage of high school seniors in the United States who rate selected personal life goals as being "extremely important," by gender and race: selected years, 1976-1996

	1976	1981	1986	1991	1992	1993	1994	1995	1996
Being successful in my line of work									
Total	53	57	61	62	66	65	63	62	65
Gender									
Male	53	58	62	60	63	63	61	62	62
Female	52	57	60	64	69	67	66	62	68
Race									
White	50	55	58	59	65	62	60	59	63
Black	67	71	73	75	80	74	79	72	74
Having a good marriage and family life									
Total	73	76	75	76	78	79	76	78	78
Gender									
Male	66	71	69	71	72	74	70	73	74
Female	80	82	82	83	84	85	81	83	81
Race									
White	72	77	76	76	79	79	76	78	78
Black	75	73	76	78	75	76	72	76	75
Having lots of money									
Total	15	18	27	28	29	26	26	25	25
Gender									
Male	20	24	34	37	35	32	32	30	33
Female	11	13	18	19	22	18	19	19	16
Race									
White	12	15	24	25	24	20	22	21	21
Black	33	32	38	39	46	45	47	41	43

Note: Data are based on one of six questionnaire forms, with a resulting sample size one-sixth of the total sample size for each year.

Sources: Johnston, L.D., Bachman, J.G., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1976, 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. Questionnaire Form 1, items A007A, A007B, and A007C.

Table SD 1.1.B

Percentage of high school seniors in the United States who rate selected social life goals as being "extremely important," by gender and race: selected years, 1976-1996

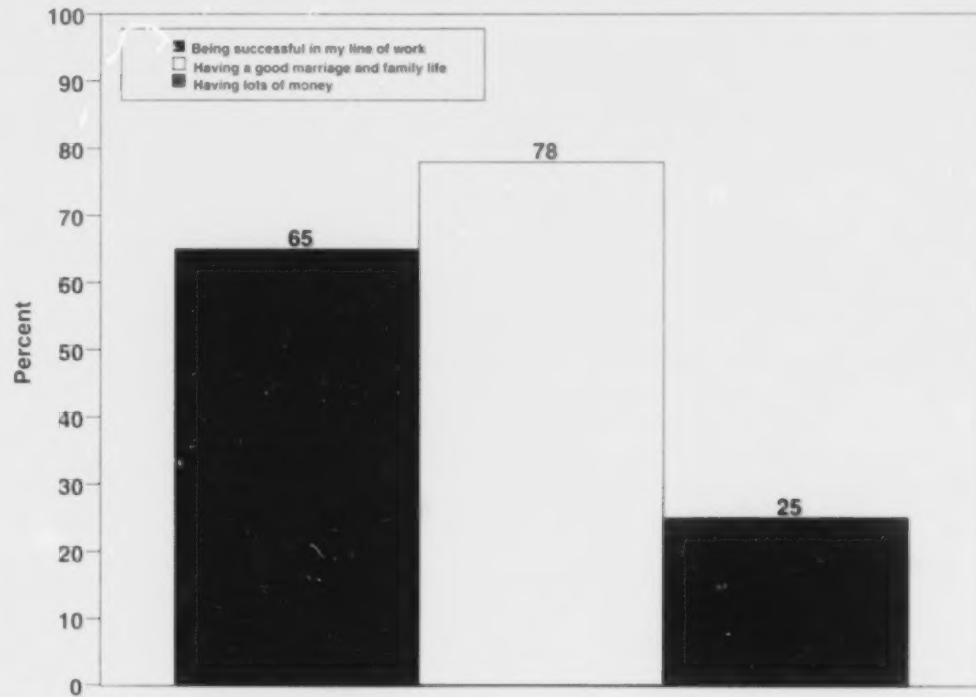
	1976	1981	1986	1991	1992	1993	1994	1995	1996
Making a contribution to society									
Total	18	18	17	21	22	24	24	20	24
Gender									
Male	16	19	18	20	22	25	23	19	23
Female	20	17	16	22	23	25	25	21	26
Race									
White	18	18	16	20	22	24	23	19	23
Black	23	21	20	27	27	25	29	25	29
Working to correct social and economic inequalities									
Total	10	10	9	12	15	15	14	10	12
Gender									
Male	8	9	7	11	14	14	12	9	11
Female	13	10	11	13	17	16	16	10	12
Race									
White	8	7	7	10	13	12	11	8	9
Black	20	21	19	21	26	21	25	18	19
Being a leader in my community									
Total	7	8	9	11	13	13	14	12	15
Gender									
Male	8	8	11	12	14	17	14	14	16
Female	6	7	6	10	11	10	13	10	13
Race									
White	6	7	8	9	11	12	12	10	14
Black	14	14	12	17	21	19	21	22	23

Note: Data based on one of six questionnaire forms, with a resulting sample size one-sixth of the total sample size for each year.

Sources: Johnston, L.D., Bachman, J.G., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1976, 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. Questionnaire Form 1, items A007G, A007H, and A007L.

Figure SD 1.1.A

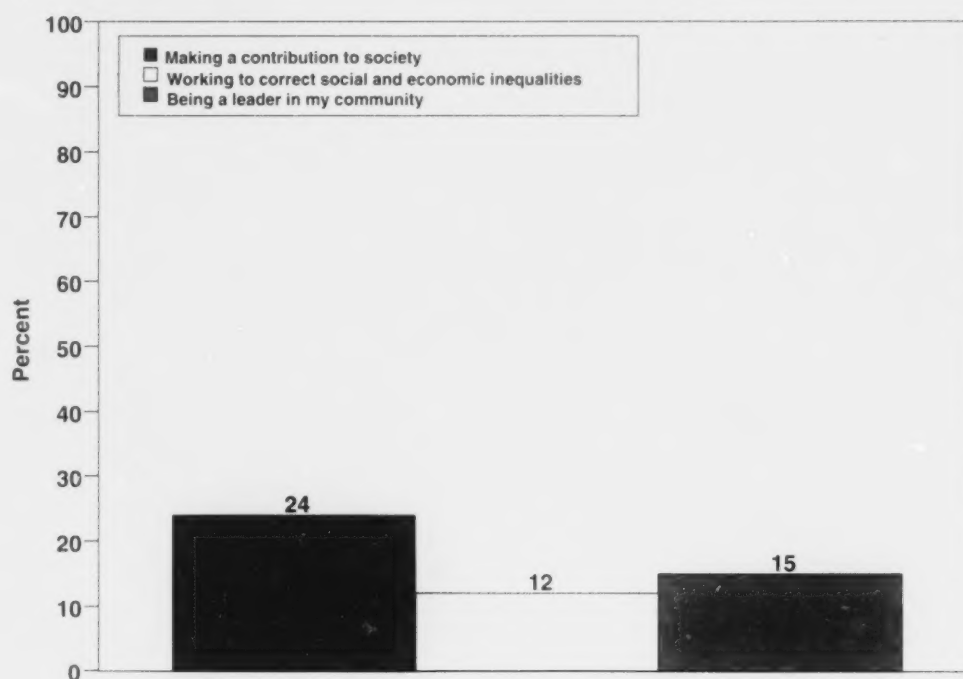
Percentage of high school seniors in the United States who rate selected personal life goals as being "extremely important": 1996



Sources: Johnston, L.D., Bachman, J.G., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1976, 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. Questionnaire Form 1, items A007A, A007B, and A007C.

Figure SD 1.1.B

Percentage of high school seniors in the United States who rate selected social life goals as being "extremely important": 1996



Sources: Johnston, L.D., Bachman, J.G., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1976, 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. Questionnaire Form 1, items A007G, A007H, and A007L.

SD 1.2

PEER APPROVAL

As children grow older, peer relationships come to play an increasingly important role in determining their own behaviors and attitudes.¹ For example, teenagers reporting that a large proportion of their friends are (or would like to be) sexually active are more likely to become sexually active themselves.²

Two measures of potential peer influence are offered here: the percentage of youth reporting that getting good grades has great or very great importance to their peers, and the percentage reporting that peers would disapprove of intentionally angering a teacher in school. Between 1980 and 1996, the percentage of 12th-graders reporting that their peers value good grades stayed fairly constant, varying between 44 percent and 49 percent (see Table SD 1.2.A). During that same time period, the percentage reporting peer disapproval of angering a teacher in school decreased from 41 percent in 1980 to 35 percent in 1996 (see Table SD 1.2.B).

Differences by Age. Eighth-grade students were more likely in 1996 than either 10th or 12th-graders to report that their peers consider good grades to be of great or very great importance (55 percent versus 45 percent and 46 percent, respectively). In that same year, on the other hand, more 12th-grade students (35 percent) than 8th or 10th graders (23 percent) were likely to report peer disapproval of intentionally angering a teacher in school (see Tables SD 1.2.A and SD 1.2.B).

Differences by Gender. Female students were slightly more likely than males to report that their peers value good grades, and that they would disapprove of intentionally angering teachers; for example, among 12th-grade youth in 1996, 49 percent of females and 44 percent of males reported that peers hold good grades to be of great or very great importance (see Table SD 1.2.A). In that same year, 40 percent of 12th-grade females and 29 percent of 12th-grade males reported peer disapproval of intentionally angering a teacher in school (see Table SD 1.2.B).

Differences by Race. For all years for which data are presented, black students in all grades were considerably more likely than their white counterparts to report strong peer support for good grades (see Figure SD 1.2.A); for example, in 1996, 42 percent of white and 69 percent of black 12th graders reported that their peers believed that good grades were of great or very great importance. Black students are less likely to report peer disapproval of intentionally angering teachers in the 8th, 10th, and 12th grades. The difference by race is largest among high school seniors, in a trend that has been consistent since 1990 (see Figure SD 1.2.B).

Hayes, C.D. *Risking the Future*, p. 105; Newcomer, S.E., Gilbert, M. and Udry, J.R. "Perceived and Actual Same-Sex Behavior as Determinants of Adolescent Sexual Behavior." Paper presented at the Annual Meeting of the American Psychological Association, Montréal, Canada, 1980. Cited in National Commission on Children. 1991. *Beyond Rhetoric: A New American Agenda for Children and Families*, Final Report of the National Commission on Children, page 351. Washington, D.C.: U.S. Government Printing Office.

Hayes, C.D. *Risking the Future*, p. 105; Cvetkovitch, G., and Grote, B. "Psychological Development and the Social Problem of Teenage Illegitimacy." In *Adolescent Pregnancy and Childbearing: Findings from Research* (C. Chilman, ed). Washington, D.C.: U.S. Department of Health and Human Services, 1980. Cited in National Commission on Children. 1991. *Beyond Rhetoric: A New American Agenda for Children and Families*, Final Report of the National Commission on Children, p. 351. Washington, D.C.: U.S. Government Printing Office.

Table SD 1.2 A

Percentage of 8th-, 10th-, and 12th-grade students in the United States reporting that good grades have great or very great importance to peers, by gender and race: selected years, 1980-1996

	1980	1985	1990	1991	1992	1993	1994	1995	1996
8th Grade									
Total	—	—	—	51	52	54	54	55	55
Gender									
Male	—	—	—	50	50	54	52	52	54
Female	—	—	—	53	53	54	55	56	55
Race									
White	—	—	—	47	47	49	49	48	48
Black	—	—	—	72	72	70	70	72	77
10th Grade									
Total	—	—	—	44	43	39	42	44	45
Gender									
Male	—	—	—	42	42	36	39	43	42
Female	—	—	—	46	44	42	45	45	47
Race									
White	—	—	—	38	38	35	38	39	40
Black	—	—	—	67	66	59	64	67	65
12th Grade									
Total	48	49	48	44	45	46	45	46	46
Gender									
Male	48	50	46	41	42	43	44	41	44
Female	48	48	51	47	48	48	46	50	49
Race									
White	43	43	43	37	39	40	39	40	42
Black	78	77	76	71	70	61	67	67	69

Note: Data for 8th- and 10th-grade students based on one of two questionnaire forms, with a resulting sample size one-half of the total sample size for each grade in each year. Data for 12th-grade students are based on one of six questionnaire forms, with a resulting sample size one-sixth of the total sample size for each year. Data for 8th and 10th grades available since 1981.

Sources: Bachman, J.G., Johnston, L.D., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1980. Questionnaire Form 5, item E06D; Bachman, J.G., Johnston, L.D., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1985, 1990-1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. Questionnaire Form 3, item E06D; Data for 8th and 10th grades are from unpublished questionnaire responses, Form 1, item E10D.

Table SD 1.2.B

Percentage of 8th-, 10th-, and 12th-grade students in the United States reporting peer disapproval of intentionally angering a teacher in school, by gender and race: selected years, 1980-1996

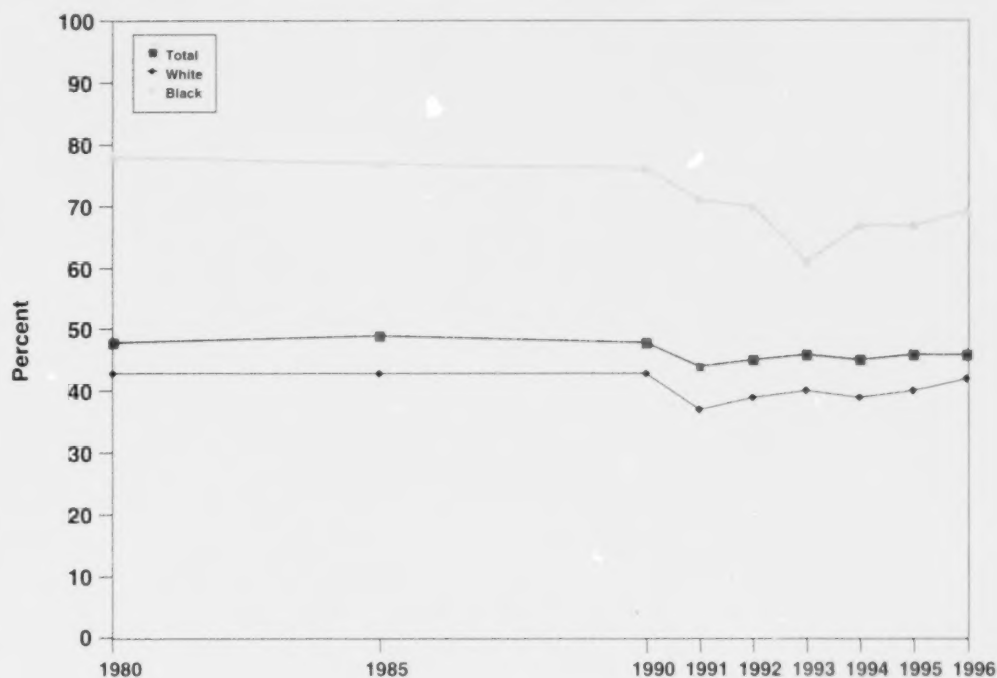
	1980	1985	1990	1991	1992	1993	1994	1995	1996
8th Grade									
Total	—	—	—	26	24	24	21	22	23
Gender									
Male	—	—	—	22	20	20	18	19	20
Female	—	—	—	30	27	26	23	24	26
Race									
White	—	—	—	26	24	24	22	22	23
Black	—	—	—	23	24	23	22	22	22
10th Grade									
Total	—	—	—	26	24	24	26	24	23
Gender									
Male	—	—	—	21	19	19	22	21	19
Female	—	—	—	31	28	28	30	28	26
Race									
White	—	—	—	27	25	25	26	25	23
Black	—	—	—	22	21	20	23	19	20
12th Grade									
Total	41	42	33	33	34	34	33	36	35
Gender									
Male	37	35	29	31	28	30	25	32	29
Female	46	48	38	37	39	37	40	41	40
Race									
White	44	43	35	34	35	34	34	36	36
Black	29	33	30	29	30	27	25	33	28

Note: Data for 8th- and 10th-grade students based on one of two questionnaire forms, with a resulting sample size one-half of the total sample size for each grade in each year. Data for 12th-grade students based on one of six questionnaire forms, with a resulting sample size one-sixth of the total sample size for each year. Data for 8th and 10th grades available since 1991.

Sources: Bachman, J.G., Johnston, L.D., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1980, 1985, 1990-1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. Questionnaire Form 1, item D007; Data for 8th and 10th grades are from unpublished questionnaire responses, Form 1, item E08.

Figure SD 1.2.A

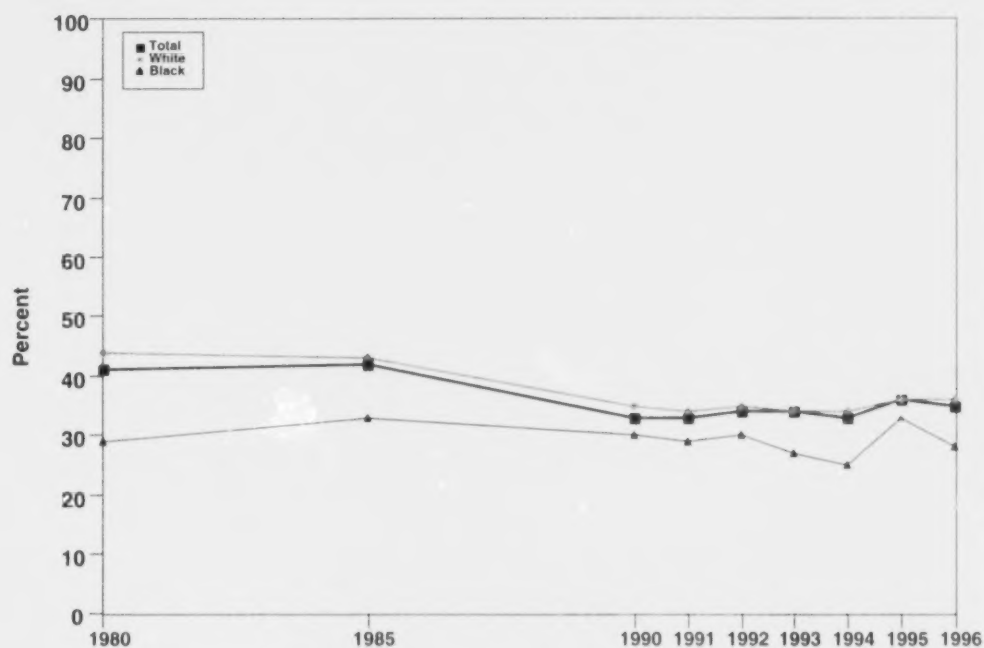
Percentage of high school seniors in the United States reporting that good grades have great or very great importance to peers, by race: selected years, 1980-1996



Sources: Bachman, J.G., Johnston, L.D., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1980. Questionnaire Form 5, item E06D; Bachman, J.G., Johnston, L.D., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1985, 1990-1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. Questionnaire Form 3, item E06D; Data for 8th and 10th grades are from unpublished questionnaire responses, Form 1, item E10D.

Figure SD 1.2.B

Percentage of high school seniors in the United States reporting peer disapproval of intentionally angering a teacher in school, by race: selected years, 1980-1996



Sources: Bachman, J.G., Johnston, L.D., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1980, 1985, 1990-1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. Questionnaire Form 1, item D007; Data for 8th and 10th grades are from unpublished questionnaire responses, Form 1, item E08.

SD 1.3

RELIGIOUS ATTENDANCE AND RELIGIOSITY

Research relating religion to children's day-to-day conduct suggests that teens who are religious are more likely to avoid high-risk behaviors.³

The number of 12th-grade students who report weekly religious attendance has declined from two out of every five students (41 percent) in 1976 to one out of every three students (31-33 percent) since 1991. During that same time period, the percentage of 12th-grade students who report that religion plays a very important role in their lives stayed fairly constant, varying between 26 percent and 31 percent (see Figure SD 1.3).

Differences by Age. Data for students in the 8th and 10th grades, available since 1991, indicate that younger adolescents are more likely to report weekly religious attendance but are not more likely to report that religion plays a very important role in their lives (see Tables SD 1.3.A and SD 1.3.B). In 1996, 43 percent of 8th graders reported weekly religious attendance, versus 38 percent of 10th-grade and 33 percent of 12th-grade students. During that same year, the percentage reporting that religion played an important role in their lives was about 30 percent for all three grades.

Differences by Gender. Females in all grades are somewhat more likely than males to report weekly religious attendance and that religion plays a very important role in their lives (see Tables SD 1.3.A and SD 1.3.B).

Differences by Race. Black students across grades have consistently been nearly twice as likely as their white counterparts to report that religion plays a very important role in their lives; for example, in 1996, 55 percent of black 12th graders reported that religion played such a role, compared with 27 percent of white 12th-grade students.

³National Commission on Children. 1991. *Beyond Rhetoric: A New American Agenda for Children and Families*. Final Report of the National Commission on Children, page 352. Washington, D.C.: U.S. Government Printing Office.

Table SD 1.3.A

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report weekly religious attendance, by gender and race: selected years, 1976-1996

	1976	1981	1986	1991	1992	1993	1994	1995	1996
8th Grade									
Total	—	—	—	46	43	42	42	42	43
Gender									
Male	—	—	—	44	41	39	40	40	40
Female	—	—	—	49	46	45	45	45	46
Race									
White	—	—	—	48	44	44	44	43	44
Black	—	—	—	47	46	42	42	46	45
10th Grade									
Total	—	—	—	38	39	40	37	37	38
Gender									
Male	—	—	—	35	37	37	35	35	35
Female	—	—	—	42	41	43	39	40	40
Race									
White	—	—	—	39	39	41	37	37	38
Black	—	—	—	44	45	44	41	44	38
12th Grade									
Total	41	40	34	31	32	32	32	32	33
Gender									
Male	36	36	31	28	31	29	30	30	30
Female	46	44	38	34	34	34	35	35	35
Race									
White	42	41	35	31	32	31	32	32	32
Black	37	40	36	38	35	35	39	40	38

Note: Data for 8th-, and 10th-grade students based on one of two questionnaire forms, with a resulting sample size one-half of the total sample size for each grade in each year. Data for 12th-grade students are based on one of six questionnaire forms, with a resulting sample size one-sixth of the total sample size for each year. Data for 8th and 10th grades available since 1991.

Sources: Johnston, L.D., Bachman, J.G., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1976, 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. 8th and 10th grade 1991-1996 Questionnaire Forms 1 and 2, item C12B. 12th grade 1976, 1981, and 1986 Questionnaire Forms 1-5 and 12th grade 1991-1996 Questionnaire Forms 1-6, item C13b.

Table SD 1.3.B

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report that religion plays a very important role in their lives, by gender and race: selected years, 1976-1996

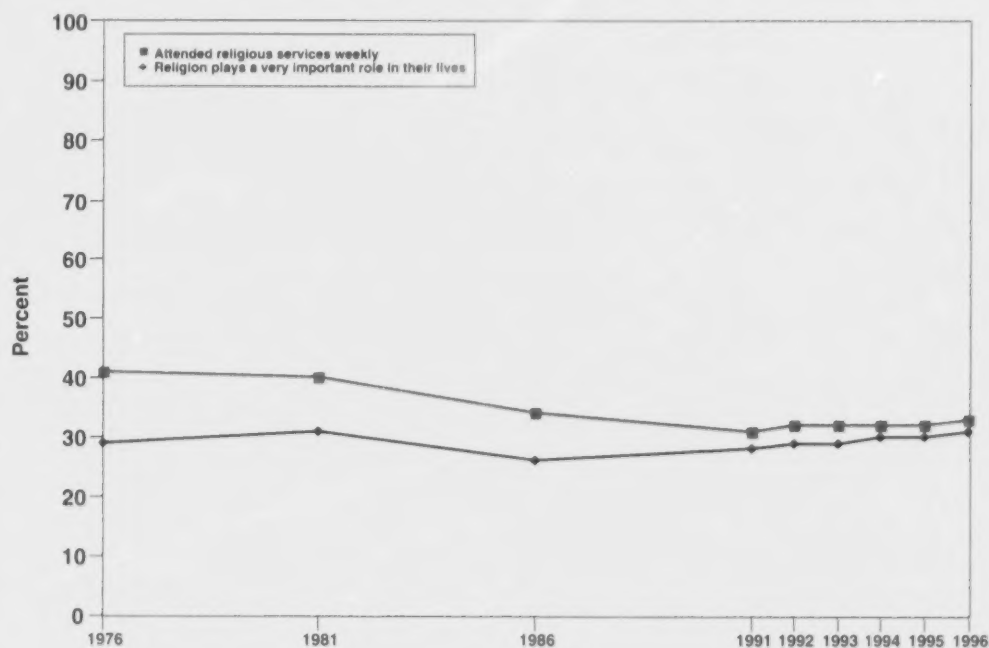
	1976	1981	1986	1991	1992	1993	1994	1995	1996
8th Grade									
Total	—	—	—	29	27	30	30	30	32
Gender									
Male	—	—	—	27	26	27	29	28	29
Female	—	—	—	31	28	32	32	32	34
Race									
White	—	—	—	26	23	26	26	26	27
Black	—	—	—	46	46	42	47	45	47
10th Grade									
Total	—	—	—	29	28	29	28	29	29
Gender									
Male	—	—	—	26	26	26	24	26	26
Female	—	—	—	31	29	31	32	31	31
Race									
White	—	—	—	24	24	26	24	25	26
Black	—	—	—	52	50	50	48	49	47
12th Grade									
Total	29	31	26	28	29	29	30	30	31
Gender									
Male	24	25	23	24	26	26	27	27	27
Female	34	36	30	31	33	33	32	33	35
Race									
White	26	27	23	24	25	24	26	26	27
Black	51	51	51	50	51	51	49	52	55

Note: Data for 8th- and 10th-grade students based on one of two questionnaire forms, with a resulting sample size one-half of the total sample size for each grade in each year. Data for 12th-grade students are based on one of six questionnaire forms, with a resulting sample size one-sixth of the total sample size for each year. Data for 8th and 10th grades available since 1991.

Sources: Johnston, L.D., Bachman, J.G., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1976, 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. 8th and 10th grade 1991-1996 Questionnaire Forms 1 and 2, item C13. 12th grade 1976, 1981, and 1986 Questionnaire Forms 1-5 and 12th grade 1991-1996 Questionnaire Forms 1-6, item C13c.

Figure SD 1.3

Percentage of high school seniors in the United States reporting weekly religious attendance and reporting religion is important in their lives: selected years, 1976-1996



Sources: Johnston, L.D., Bachman, J.G., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1976, 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. 8th and 10th grade 1991-1996 Questionnaire Forms 1 and 2, item C12B. 12th grade 1976, 1981, and 1986 Questionnaire Forms 1-5 and 12th grade 1991-1996 Questionnaire Forms 1-6, items C13b and C13c.

SD 1.4

VOTING BEHAVIOR OF YOUNG ADULTS

Voting is a critical exercise of citizenship in a democracy. Measures of the voting behavior of young adults may be seen as indicators of the level of youth commitment to the democratic process.

Rates of reported voter registration and voting among 18- through 20-year-olds during presidential election years declined between 1972 and 1976 and have stayed rather flat through 1996 (see Table SD 1.4.A). In 1972, 58 percent of young adults ages 18 through 20 reported that they registered to vote, and 48 percent reported that they voted. By 1996, 46 percent reported that they had registered, and 31 percent reported that they had voted (see Figure SD 1.4.A).

Differences by Gender. Reported rates of voter registration and voting are modestly higher among women both over time and within racial and ethnic groups, particularly during presidential election years; for example, in 1996, 49 percent of females and 43 percent of males ages 18 through 20 reported that they registered to vote (see Table SD 1.4.A).

Differences by Race and Hispanic Origin. Hispanic young adults are the least likely to report that they register and vote. In 1996, 27 percent of Hispanic young adults reported that they registered, and 16 percent reported that they voted. Comparable numbers for blacks are 43 percent registered and 28 percent voted. Whites were the most likely to report that they registered (47 percent) and voted (33 percent) in 1996 (see Figure SD 1.4.B). Since 1972, the percentage of Hispanic young adults who reported that they vote in presidential election years has declined by almost one-half, from 30 percent to 16 percent (see Table SD 1.4.A).

Differences by Electoral Cycle. The percentage of young adults who reported that they voted in nonpresidential election years since 1974 is substantially lower than the percentage who reported that they voted during presidential election years (see Table SD 1.4.B). Rates of reported registration and voting have been remarkably stable during such years, across nonpresidential election years, with overall rates varying by only a few percentage points across the years.

Table SD 1.4.A

Percentage of persons ages 18 through 20 in the United States who reported that they registered to vote and percentage who reported that they voted in presidential election years, by race and Hispanic origin and by gender: selected years, 1972-1996

	1972	1976	1980	1984	1988	1992	1996
Percentage who reported registering							
All races^a							
Total	58	47	45	47	45	48	46
Male	58	46	44	45	42	47	43
Female	58	48	46	49	48	50	49
White							
Total	60	50	47	48	46	51	47
Male	61	48	45	46	43	49	45
Female	60	51	48	50	48	53	49
Black							
Total	43	34	35	47	43	43	43
Male	37	33	36	43	39	41	38
Female	49	35	35	51	46	44	46
Hispanic							
Total	38	29	20	25	25	23	27
Male	39	31	20	22	22	20	24
Female	37	27	20	28	27	27	31
Percentage who reported voting							
All races^a							
Total	48	38	36	37	33	39	31
Male	48	36	35	34	31	37	28
Female	49	40	37	39	35	41	34
White							
Total	51	41	38	38	35	41	33
Male	51	39	36	35	32	39	30
Female	51	42	39	40	37	43	35
Black							
Total	31	23	25	36	28	32	28
Male	26	22	26	30	26	29	22
Female	35	24	25	41	30	34	34
Hispanic							
Total	30	22	13	18	16	16	16
Male	27	23	12	14	15	13	12
Female	32	21	15	21	16	19	20

^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

Note: Current Population Survey figures routinely over-estimate voter registration and turnout when compared to the official rates.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 253, No. 293, No. 322, No. 344, No. 370, No. 405, No. 414, No. 453, No. 466, and PPL24-RV, "Voting and Registration in the Election of November," report series, U.S. Government Printing Office, Washington, D.C.; Casper, L.M., and Bass, L.E. 1998. "Voting and Registration in the Election of November 1996," *Current Population Reports* P20-504 and PPL-89. Washington, D.C.: U.S. Bureau of the Census.

Table SD 1.4.B

Percentage of persons ages 18 through 20 in the United States who reported that they registered to vote and percentage who reported that they voted in nonpresidential election years, by race and Hispanic origin and by gender: selected years, 1974-1994

	1974	1978	1982	1986	1990	1994
Percentage who reported registering						
All races^a						
Total	36	35	35	35	35	37
Male	36	34	35	34	34	36
Female	36	36	35	36	36	38
White						
Total	38	36	36	35	37	40
Male	38	36	37	34	36	39
Female	38	37	35	37	38	41
Black						
Total	28	28	31	39	30	32
Male	26	25	25	40	31	31
Female	29	30	36	39	30	34
Hispanic						
Total	20	19	20	20	17	20
Male	18	23	20	19	16	18
Female	22	16	21	21	19	24
Percentage who reported voting						
All races^a						
Total	21	20	20	19	18	17
Male	21	20	20	18	18	16
Female	20	20	19	19	19	18
White						
Total	22	21	20	18	19	18
Male	23	21	22	18	19	17
Female	21	21	19	19	20	19
Black						
Total	14	15	18	21	15	13
Male	13	15	13	21	15	13
Female	14	15	21	20	15	13
Hispanic						
Total	12	11	12	10	10	11
Male	12	14	12	9	8	6
Female	13	8	13	12	12	16

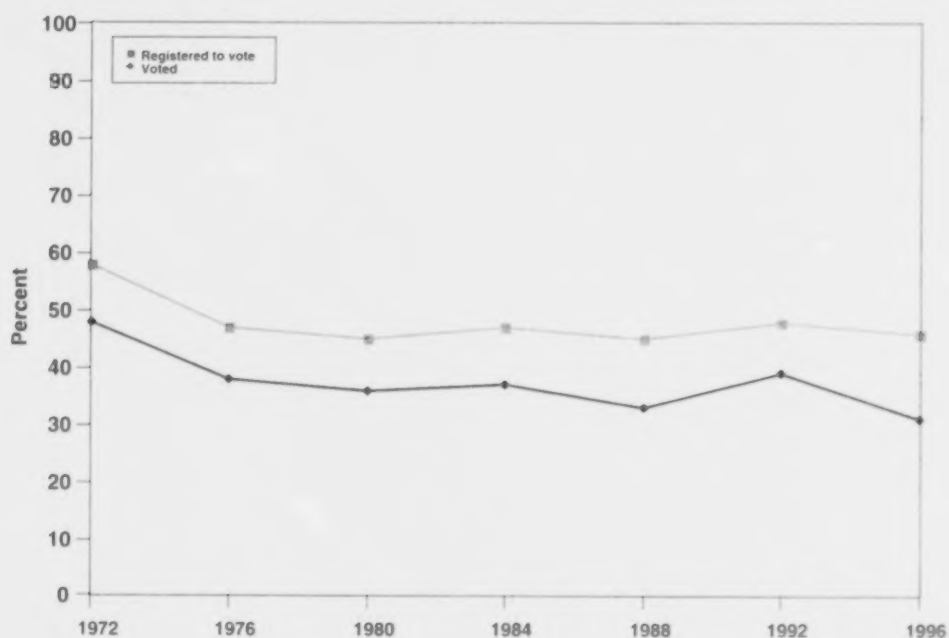
^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

Note: Current Population Survey figures routinely over-estimate voter registration and turnout when compared to the official rates.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 253, No. 293, No. 322, No. 344, No. 370, No. 405, No. 414, No. 453, No. 466, and PPL24-RV, "Voting and Registration in the Election of November 1972-1994," Washington, D.C.: U.S. Government Printing Office.

Figure SD 1.4.A

Percentage of persons ages 18 through 20 in the United States who reported that they registered to vote and percentage who reported that they voted in presidential election years: selected years, 1972-1996

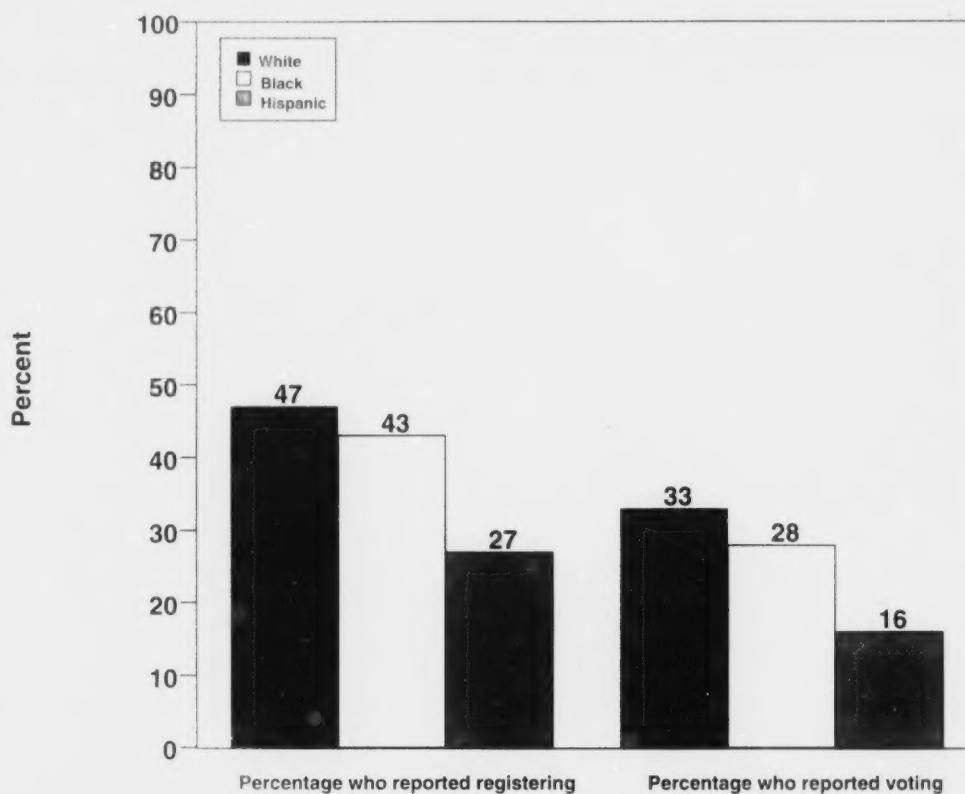


Note: Current Population Survey figures routinely over-estimate voter registration and turnout when compared to the official rates.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 253, No. 293, No. 322, No. 344, No. 370, No. 405, No. 414, No. 453, No. 466, and PPL24-RV, "Voting and Registration in the Election of November 1972-1994." Washington, D.C.: U.S. Government Printing Office.

Figure SD 1.4.B

Percentage of persons ages 18 through 20 in the United States who registered to vote and percentage who voted in presidential election years, by race and Hispanic origin^a: 1996



^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

Note: Current Population Survey figures routinely over-estimate voter registration and turnout when compared to the official rates.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 253, No. 293, No. 322, No. 344, No. 370, No. 405, No. 414, No. 453, No. 466, and PPL24-RV, "Voting and Registration in the Election of November," report series, U.S. Government Printing Office, Washington, D.C.; Casper, L.M., and Bass, L.E. 1998. "Voting and Registration in the Election of November 1996," *Current Population Reports* P20-504 and PPL-89. Washington, D.C.: U.S. Bureau of the Census.

SD 1.5

TELEVISION VIEWING HABITS

Some studies indicate that excessive television watching is negatively related to the academic attainment of children and youth; for example, children and adolescents in grades 4, 8, and 11 who watch five or more hours of television per day have substantially lower test scores than other children on average.⁴ Yet, as depicted in Figure SD 1.5, substantial percentages of students report watching large amounts of television on a daily basis.

Differences by Age. The percentage of children who report watching excessive amounts of television declines with age, as indicated in Figure SD 1.5. Among 9-year-olds, 18 percent reported watching six or more hours of television each day in 1996. Among 13-year-old students, 13 percent watched six or more hours of television. Among 17-year-olds, only 7 percent watched this amount of television each day. For all three age groups, the percentage of students spending six or more hours a day watching television increased between 1982 and 1986 and then declined through 1996.

Differences by Gender. Larger proportions of boys than girls at ages 9 and 13 are watching television for long periods of time (see Table SD 1.5.A). In 1996, 20 percent of 9-year-old boys watched television for six or more hours per day, compared with 15 percent of girls in that age group. A similar pattern is evident for 13-year-olds (See Table SD 1.5.B), while for 17-year-olds, the percentages of boys and girls watching television for long periods is the same, at 7 percent (see Table SD 1.5.C).

Differences by Race and Hispanic Origin.⁵ For each age group and for each time point of assessment, larger proportions of black students watch television for six or more hours per day than do either white or Hispanic students; for example, among 9-year-old students, 39 percent of black students, compared with 13 percent of white students, and 21 percent of Hispanic students reported watching television six or more hours per day during 1996 (see Table SD 1.5.A).

Differences by Type of School. In general, smaller percentages of children and adolescents who attend private school spend six or more hours per day watching television than do students who attend public school. The differences between public and private school pupil television viewing habits are more pronounced among 9- and 13-year-old students (see Tables SD 1.5.A, SD 1.5.B, and SD 1.5.C).

Differences by Parents' Educational Level. Children's television viewing habits also vary by parents' educational level. In general, as parents' educational levels increase, the percentages of children watching excessive amounts of television declines. In 1996, 18 percent of 13-year-olds whose parents had less than a high school education were watching six or more hours of television per day, compared with 13 percent of students with parents who graduated from high school and 10 percent of students whose parents graduated from college (see Table SD 1.5.B). A similar pattern is evident for 17-year-olds (see Table SD 1.5.C).

⁴U.S. Department of Education, National Center for Education Statistics. 1993. *Youth Indicators 1993: Trends in the Well-being of American Youth*. Washington, D.C.: U.S. Government Printing Office.

⁵Estimates for whites and blacks exclude Hispanics of those races.

Table SD 1.5.A

Percentage of 9-year-old students in the United States who watch six or more hours of television per day, by gender, race and Hispanic origin, and type of school: selected years, 1982-1996

	1982	1986	1990	1992	1994	1996
Total	26	31	23	19	19	18
Gender						
Male	30	34	27	22	23	20
Female	23	27	20	17	16	15
Race and Hispanic origin*						
White, non-Hispanic	23	26	18	14	14	13
Black, non-Hispanic	43	53	47	41	40	39
Hispanic	28	33	26	25	22	21
Type of school						
Public	27	32	24	21	19	19
Private	21	24	18	5	11	7

*Estimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Note: Parents' education is not reported for 9-years-olds because approximately one-third of these students did not know their parents' education level.

Sources: National Assessment of Educational Progress (NAEP), 1992, 1994, and 1996 Long-Term Trend Results, Math Assessment data; and unpublished Almanacs, 1978-1990.

Table SD 1.5.B

Percentage of 13-year-old students in the United States who watch six or more hours of television per day, by gender, race and Hispanic origin, type of school, and parents' highest level of education: selected years, 1982-1996

	1982	1986	1990	1992	1994	1996
Total	16	20	17	13	13	13
Gender						
Male	18	21	18	14	15	15
Female	15	19	15	11	12	11
Race and Hispanic origin*						
White, non-Hispanic	13	17	12	8	8	7
Black, non-Hispanic	32	40	35	31	35	35
Hispanic	19	21	18	19	19	17
Type of school						
Public	17	20	17	14	14	13
Private	13	*	11	6	4	3
Parents' highest level of education						
Less than high school	23	32	24	21	23	18
Graduated high school	18	22	19	16	17	13
More than high school	13	18	12	9	13	13
Graduated college	12	15	13	9	9	10

*Too few observations for a reliable estimate.

*Estimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: National Assessment of Educational Progress (NAEP), 1992, 1994, and 1996 Long-Term Trend Results, Math Assessment data; and unpublished Almanacs, 1978-1990.

Table SD 1.5.C

Percentage of 17-year-old students in the United States who watch six or more hours of television per day, by gender, race and Hispanic origin, type of school, and parents' highest level of education: selected years, 1978-1996

	1978	1982	1986	1990	1992	1994	1996
Total	5	6	9	9	7	8	7
Gender							
Male	5	7	10	9	7	10	7
Female	5	6	8	8	7	7	7
Race and Hispanic origin*							
White, non-Hispanic	4	5	6	6	4	5	4
Black, non-Hispanic	13	14	22	23	21	24	21
Hispanic	7	6	12	8	6	9	9
Type of School							
Public	5	7	9	9	7	8	7
Private	3	3	*	*	3	3	6
Parents' Highest Level of Education							
Less than high school	8	10	17	11	10	14	15
Graduated high school	5	8	10	11	10	12	9
More than high school	4	4	9	8	5	8	6
Graduated college	3	4	4	5	5	5	6

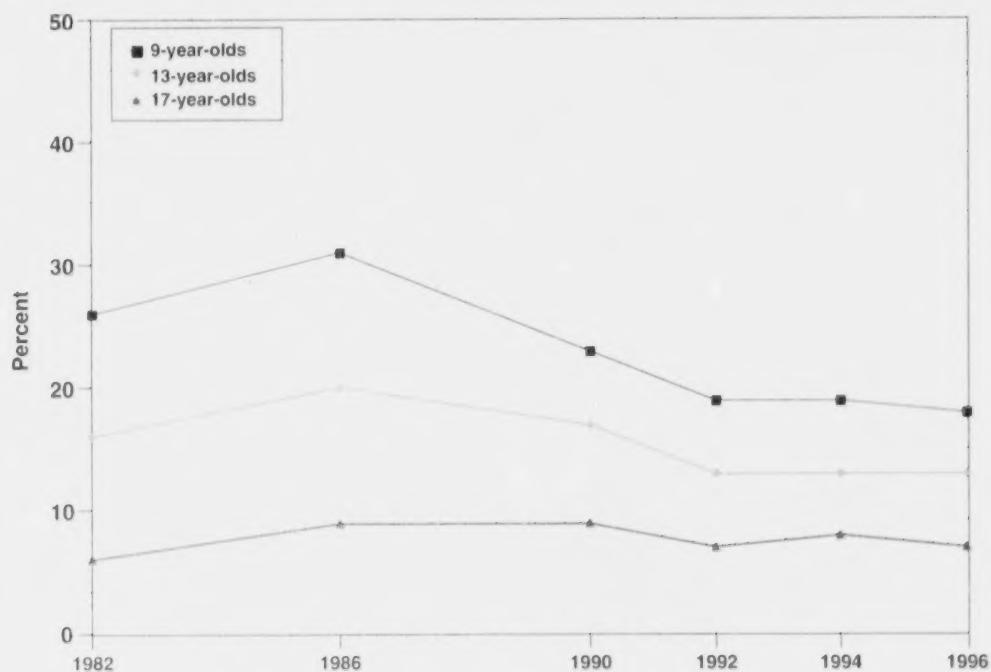
*Too few observations for a reliable estimate.

*Estimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: National Assessment of Educational Progress (NAEP), 1992, 1994, and 1996 Long-Term Trend Results, Math Assessment data; and unpublished Almanacs, 1978-1990.

Figure SD 1.5

Percentage of students in the United States who watch six or more hours of television per day, by age: selected years, 1982-1996



Sources: National Assessment of Educational Progress (NAEP), 1992, 1994, and 1996 Long-Term Trend Results, Math Assessment data; and unpublished Almanacs, 1978-1990.

SD 1.6

YOUTH VIOLENT CRIME ARREST RATES⁶

The Federal Bureau of Investigation's Violent Crime Index includes murder, forcible rape, robbery, and aggravated assault.⁷ The rate of youth arrests for these Index crimes increased substantially between 1980 and 1996, from 334.1 to 464.7 per 100,000 persons ages 10 through 17. There was a steady increase in the rate between 1990 and 1994, with declines in recent years (see Table SD 1.6).

Differences by Age and Gender. Arrest rates for Violent Index crimes have consistently been much higher among males than among females over time and across all ages (see Figure SD 1.6). Rates for both males and females increased considerably between 1980 and 1994, with declines in the past two years for both genders. In 1996, rates for males and females were 772.3 and 144.6 per 100,000, respectively (see Table SD 1.6).

Youth Violent Crime Index arrest rates climb quickly and steadily with age for males, from 133.8 per 100,000 for 10 through 12 year olds to 1,760.4 per 100,000 among 17 year olds in 1996 (see Table SD 1.6). By contrast, the rates for young women in 1996 do not increase uniformly or rapidly with age, peaking at age 16 with 257.1 arrests per 100,000, then declining to 247.5 per 100,000 for females age 17. Girls ages 10 through 12 are the least likely to be arrested for violent crimes, with only 10 per 100,000 arrested in 1996.

Table SD 1.6

Violent crime^a arrest rates for youth ages 10 through 17 in the United States, by gender and age (per 100,000): selected years, 1980-1996

	1980	1985	1990	1991	1992	1993	1994	1995	1996
Total									
Ages 10-17	334.1	303.0	428.6	461.5	482.9	505.4	527.8	511.6	464.7
Ages 10-12	46.4	56.4	70.6	79.0	85.5	86.1	91.8	89.1	81.4
Ages 13-14	261.4	251.9	368.0	405.4	444.9	461.4	494.2	461.7	409.4
Age 15	503.8	446.1	669.7	732.7	770.0	828.2	857.5	809.6	731.2
Age 16	638.5	565.9	876.2	935.2	994.4	1,028.6	1,055.6	1,021.0	905.6
Age 17	739.5	651.1	982.7	1,066.5	1,056.9	1,110.2	1,113.6	1,109.4	1,022.1
Male									
Ages 10-17	587.6	529.8	740.5	797.9	825.7	857.7	888.6	855.7	772.3
Ages 10-12	81.6	99.5	119.8	135.1	145.2	114.8	153.7	147.4	133.8
Ages 13-14	445.6	426.1	603.9	668.5	725.4	744.8	793.1	737.2	649.1
Age 15	875.4	771.7	1,144.1	1,250.6	1,291.9	1,386.5	1,421.7	1,329.9	1,195.2
Age 16	1,132.6	997.3	1,534.9	1,637.3	1,730.7	1,776.5	1,809.1	1,733.5	1,530.8
Age 17	1,325.8	1,166.1	1,758.1	1,909.7	1,877.6	1,956.8	1,950.2	1,933.6	1,760.4
Female									
Ages 10-17	70.2	66.9	104.0	111.4	126.0	138.8	152.2	153.4	144.6
Ages 10-12	3.4	4.0	7.5	8.1	9.2	9.7	10.5	10.7	10.0
Ages 13-14	47.4	52.7	77.0	82.8	95.9	107.9	121.5	117.0	107.5
Age 15	63.4	55.3	88.5	93.5	112.4	118.7	130.6	134.7	123.3
Age 16	129.6	114.6	187.4	208.9	219.8	249.9	265.4	268.0	257.1
Age 17	131.0	114.1	183.9	189.0	210.6	224.5	246.8	250.3	247.5

^aViolent crimes include murder, forcible rape, robbery, and aggravated assault.

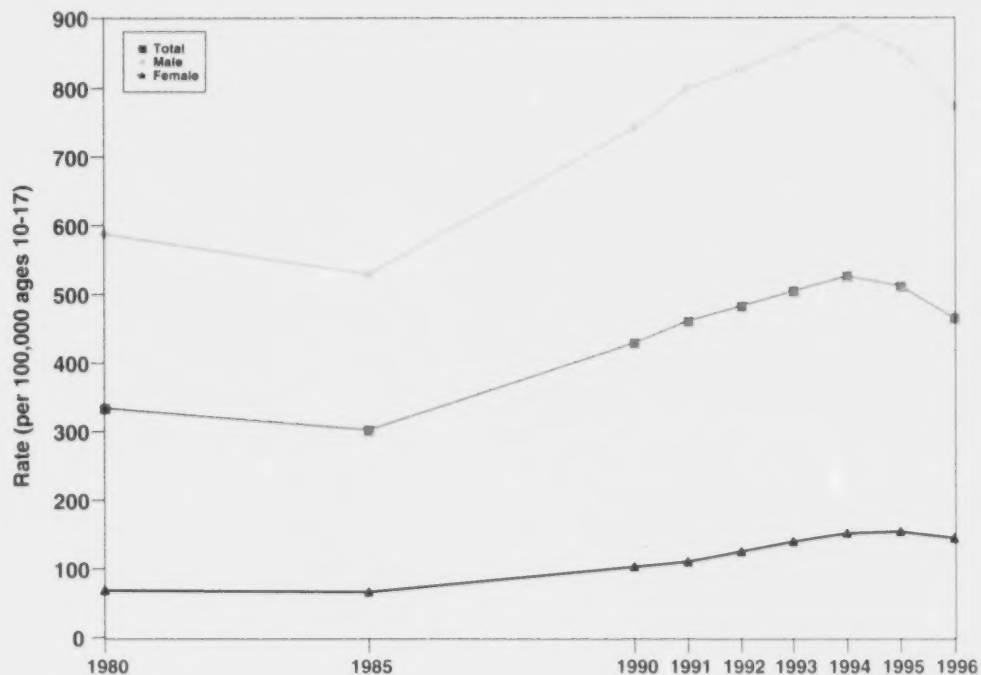
Sources: Special analysis by Howard N. Snyder, National Center for Juvenile Justice, 1998, using published and unpublished arrest data from the FBI Uniform Crime Reporting Program and population data from the U.S. Bureau of the Census. A portion of this table was originally published in Snyder, H. 1997. *Juvenile Arrests 1996*. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

⁶Arrests for violent crimes were chosen in preference to other arrest measures as an indicator both because of the particular hazards that violent crime represents to our society and because arrests for violent crimes are less likely to be affected over time by changes in police practice and policy than other types of crime.

⁷Violent crimes in addition to the four included in the FBI's Violent Crime Index, including kidnapping, extortion, and forcible sodomy, are not included in this indicator.

Figure SD 1.6

Violent crime^a arrest rates for youth ages 10 through 17 in the United States, by gender (rate per 100,000): selected years, 1980-1996



^aViolent crimes include murder, forcible rape, robbery, and aggravated assault.

Sources: Special analysis by Howard N. Snyder, National Center for Juvenile Justice, 1998, using published and unpublished arrest data from the FBI Uniform Crime Reporting Program and population data from the U.S. Bureau of the Census. A portion of this table was originally published in Snyder, H. 1997. *Juvenile Arrests 1996*. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

SD 1.7

LOW-RISK TEEN CUMULATIVE RISK INDEX⁸

Statistics often show rates of individual problem behaviors among adolescents, such as drug or alcohol use, school drop out, or early sexual activity. Yet youth engaged in one problem behavior are often engaged in others as well; their risk of immediate and long-term harm increases as the number of risky behaviors increases.⁹

Most parents and other members of society believe that the ideal is for youth to avoid all risky behaviors. The Low-Risk Teen Cumulative Risk Index is designed to identify the degree to which adolescents avoid a set of key problem behaviors simultaneously. This measure is created from 1995 youth-report data for five behaviors, where a youth is defined as having no risks if he or she:

- has not been suspended or expelled from school,
- has never had sexual intercourse,
- has never used illegal drugs (including marijuana, cocaine, inhalants, heroin, PCP, ecstasy, amphetamines, LSD, mushrooms, and pills),
- has never drunk alcohol unsupervised by adults, and
- has never smoked cigarettes regularly (at least once a day for 30 days).

Differences by Age. The proportion of young people who report avoiding all of these risk behaviors decreases with age (see Figure SD 1.7). By age 15 (by the 15th birthday), slightly more than half of responding young people (53 percent) have avoided all five risk behaviors, and 32 percent have experienced two or more risks. By age 17 (by the 17th birthday), an age at which most young people are still in high school, the proportion with no risks drops to 29 percent, and nearly half (45 percent) have now experienced two or more risk behaviors. Once youth reach their 18th birthday, only 22 percent report having engaged in no risk behaviors, while 48 percent report two or more such behaviors. Table SD 1.7 presents additional data on the percentage who report only one risk, and two or more risk behaviors.

No Risk Behaviors by Gender, Family Structure, and Family Income. Across the adolescent years, more girls than boys report being free of any of the five risk behaviors. Similarly, children from two-parent families are more likely than children in single-parent families to avoid risky behaviors. Family income is another mitigating factor, with children in mid- to high-income families somewhat more likely than others to report that they avoid risk behaviors (see Table SD 1.7).

⁸This measure uses different source data than a similar risk index presented in previous editions of this publication and should not be compared.

⁹Moore, K.A., and Gleit, D.A. 1994. "Taking the Plunge: An Examination of Positive Youth Development." *Journal of Adolescent Research* 10(11): 15-40.

Table SD 1.7

Percentage of youth by their 12th through 18th birthdays in the United States who have engaged in selected risk^a behaviors, by age, gender, family structure, and family income: 1995

	By Age 12	By Age 13	By Age 14	By Age 15	By Age 16	By Age 17	By Age 18
All respondents							
No risks	87	79	66	53	40	29	22
Only one risk	3	5	10	15	21	26	30
Two or more risks	10	16	24	32	39	45	48
Respondents with no risks							
Gender							
Male	84	75	62	49	37	27	21
Female	92	84	71	57	44	32	23
Family structure							
Two parents	91	85	73	61	48	36	28
Single-mother	84	73	58	43	32	23	16
Other ^b	82	72	57	42	31	20	15
Family income							
\$15,000 and under	85	76	63	48	37	27	20
\$15,001-\$35,000	85	76	62	52	39	28	22
\$35,001-\$50,000	90	82	70	57	43	31	26
\$50,001 and over	92	85	72	58	45	33	23

^aRisks are drawn from youth reports of selected behaviors in the 1995 National Longitudinal Study of Adolescent Health. The behaviors examined for this cumulative index are suspension or expulsion from school, engaging in sexual intercourse, use of illegal drugs, unsupervised consumption of alcohol, and regular smoking of tobacco cigarettes. A status of "no risks" indicates that a youth reported involvement in none of the five tracked behaviors for each of the age periods specified.

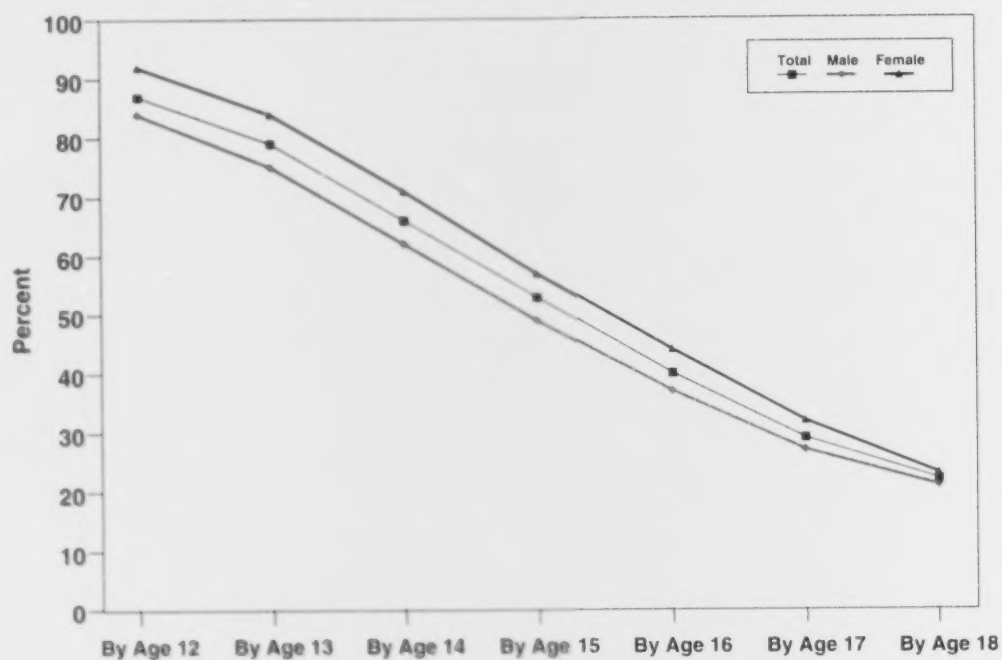
^b"Other" family structure includes all family types that are not households with two biological or adoptive parents from birth, or female single-parent households. Step-families, single-father families, and children living with their grandparents are included as "other" families in Table SD 1.7.

Note: Age breaks for this indicator represent percentages of youth who have engaged (or not engaged) in the specified behaviors by the indicated birthdays.

Source: The National Longitudinal Study of Adolescent Health (Add Health) Wave 1, 1995, tabulations by Child Trends, Inc.

Figure SD 1.7

Percentage of youth by their 12th through 18th birthdays in the United States with no risks^a on cumulative risk measure, by age and gender: 1995



^aRisks are drawn from youth reports of selected behaviors in the 1995 National Longitudinal Study of Adolescent Health. The behaviors examined for this cumulative index are suspension or expulsion from school, engaging in sexual intercourse, use of illegal drugs, unsupervised consumption of alcohol, and regular smoking of tobacco cigarettes. A status of "no risks" indicates that a youth reported involvement in none of the five tracked behaviors for each of the age periods specified.

Note: Age breaks for this indicator represent percentages of youth who have engaged (or not engaged) in the specified behaviors by the indicated birthdays.

Source: The National Longitudinal Study of Adolescent Health (Add Health) Wave 1, 1995, tabulations by Child Trends, Inc.

SD 1.8

CLOSENESS WITH PARENTS

The quality of relationships that youth have with parents is important for several aspects of their development; for example, a positive parent-child relationship can promote an adolescent's ability to handle stress.¹⁰ Recent research suggests that closeness with parents serves as a protective factor against emotional distress, substance use, early sexual activity, and suicide thoughts or attempts.¹¹

Analyses based on data from the 1995 National Longitudinal Study of Adolescent Health allow for an examination of how emotionally close adolescents feel to their biological and non-biological mothers and fathers. The data presented in Table SD 1.8 show the proportion of youth ages 12 through 17 who report feeling "very close" to their resident and non-resident parents.

Differences by Age. More young adolescents report feeling very close to parents than do older adolescents; for example, more youth ages 12 through 14 (78 percent) report a very close relationship with their resident biological mother than do youth ages 15 through 17 (66 percent). Similar patterns are found for reports of closeness to resident and non-resident biological fathers, as well as resident non-biological parents (see Figure SD 1.8).

Differences by Gender. Males report feeling closer to their parents than do females; for example, 74 percent of adolescent males compared with 65 percent of adolescent females report feeling very close to their resident biological mothers. Similarly, 64 percent of adolescent males report feeling very close to their resident biological fathers, compared with 51 percent of female youth.

Differences by Race and Hispanic Origin.¹² More black and Hispanic youth than white youth report feeling very close to their mothers or mother-figures; for example, 78 percent of black adolescents and 74 percent of Hispanic adolescents report feeling very close to their resident biological mother, while only 68 percent of white adolescents report a similar relationship with their resident biological mother. Feelings of closeness with fathers followed the same pattern, with black and Hispanic youth reporting closer relationships than white youth. However, the variations by race or Hispanic origin were not as pronounced for fathers as for mothers (see Table SD 1.8).

Differences by Socioeconomic Status. Generally speaking, youth from low income families are more likely than other youth to report being very close to their resident parents (biological and non-biological); for example, youth whose parents earned between \$5,000 and \$9,999 per year were more likely to report very close relationships with their resident biological mother (78 percent) and father (66 percent) than were youth whose parents earned \$25,000 to \$34,999 per year (68 percent and 59 percent for resident biological mother and father, respectively). Similar patterns are observed when considering parent education levels of resident parents. For example, youth of parents with a high school education or less were closer to their resident mothers than were youth of more highly educated parents (see Table SD 1.8).

Differences by Status of Parent. More adolescents report feelings of closeness with resident than with non-resident biological parents. Furthermore, adolescents report feeling closer to non-biological resident parents than non-resident biological parents; for example, 70 percent of youth report feeling very close to their resident biological mother, compared with 61 percent who report feeling very close to their resident non-biological mother, and 37 percent who report feeling very close to their non-resident biological mother. Similar patterns exist for fathers and father-figures.

¹⁰Hawes, D. 1996. Who knows who best: A program to stimulate parent-teen interaction. *School Counselor*, 44(2), 115-121.

¹¹Resnick, M.D., et al. 1997. Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. *Journal of the American Medical Association*, 278(10), 823-832.

¹²Estimates of whites and blacks exclude Hispanics of those races.

Table SD 1.8

Percentage of youth ages 12 through 17 in the United States who report feeling very close to their parents, by parent type and by age, gender, race and Hispanic origin, parents' education, and socioeconomic status: 1995

	Resident Biological Mother	Resident Non- Biological Mother	Non- Resident Biological Mother	Resident Non- Biological Father	Non- Biological Father	Non- Resident Biological Father
Total	70	61	37	58	34	21
Age						
12-14	78	71	38	68	44	29
15-17	66	58	37	53	29	18
Gender						
Male	74	64	41	64	40	25
Female	65	57	32	51	29	17
Race and Hispanic origin^a						
White, non-Hispanic	68	58	31	58	34	20
Black, non-Hispanic	78	65	55	61	33	22
Hispanic	74	67	41	59	35	24
Other ^b	64	63	29	53	43	20
Education of most educated parent						
Less than high school	75	68	38	60	47	19
High school graduate	72	63	42	59	36	20
Some college or post-secondary	67	59	27	54	24	18
College graduate or more	67	56	37	57	34	24
Annual household income						
Less than \$5,000	78	74	48	77	72	31
\$5,000 - \$9,999	78	57	36	66	54	23
\$10,000 - \$14,999	75	71	44	56	36	15
\$15,000 - \$24,999	73	72	38	60	43	20
\$25,000 - \$34,999	68	49	42	59	32	17
\$35,000 - \$49,999	72	51	33	62	34	24
\$50,000 - \$74,999	67	53	47	57	28	23
\$75,000 - \$99,999	65	61	36	56	33	20
\$100,000 and above	64	56	20	53	33	27

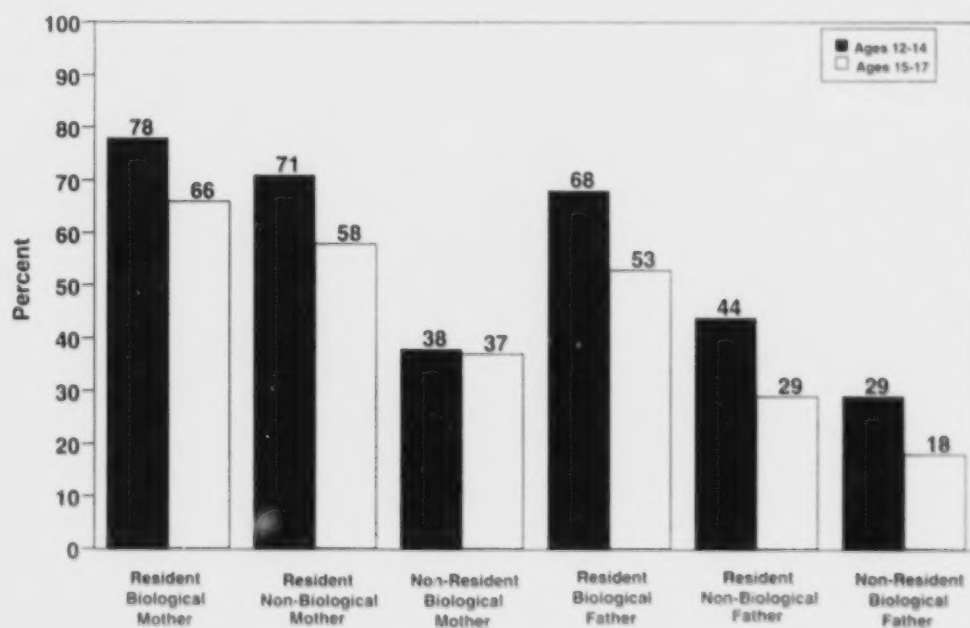
^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

^b"Other" race category includes respondents who chose Asian, American Indian, or other race, and also did not identify themselves (in a separate question) as Hispanic.

Source: The National Longitudinal Study of Adolescent Health (Add Health) Wave 1, 1995, tabulations by Child Trends, Inc.

Figure SD 1.8

Percentage of youth ages 12 through 17 in the United States who report feeling very close to their parents, by age and parent type: 1995



Source: The National Longitudinal Study of Adolescent Health (Add Health) Wave 1, 1995, tabulations by Child Trends, Inc.

SD 1.9

PARENTS' ACTIVITIES WITH CHILDREN

Mothers and fathers are active in children's lives in a variety of ways. In addition to providing for children's basic care and protection, parents also serve as important teachers, mentors, role models, playmates, companions, and confidantes. The common theme of these additional roles is the direct interaction which takes place between parent and child in various contexts. Recent research indicates that positive interactions between parents and children foster positive developmental outcomes for children.¹³ Furthermore, there is a growing interest in identifying ways that fathers' involvement in children's lives uniquely contributes to child well-being.¹⁴

Data from the first and second waves of the National Survey of Families and Households (NSFH 1988 and 1995) were used to examine mothers' and fathers' interactions with their children (ages 5 through 17) in daily activities. Activities included eating meals together, spending time in activities away from home, working on a project together, having private talks, and helping with reading or homework.

As shown in Table SD 1.9.A, findings from the 1995 data include the following:

- Over half of mothers (55 percent) and two-fifths of fathers (42 percent) eat dinner with their child every day of the week.
- A similar percentage of mothers and fathers report going on outings with their child several times a week (17 percent and 18 percent for mothers and fathers, respectively) as well as almost every day (7 percent and 5 percent, respectively).
- Twenty percent of mothers and 12 percent of fathers worked on a project at home with their child almost every day. An additional 32 percent of mothers and 28 percent of fathers worked on a project with their child several times a week.
- The majority of mothers often engage their children in private conversations, with 22 percent reporting having private talks almost every day, and another 31 percent reporting private talks several times a week. Among fathers, 27 percent reported having private talks with their children at least several times a week.
- Mothers are also frequently helping their children with homework and reading. Forty percent report this type of interaction on an almost daily basis, with an additional 29 percent reporting helping their child with homework several times a week. One-third (33 percent) of fathers also report helping with homework several times a week, with a smaller group (13 percent) reporting helping almost every day.

Trends in Parental Activities. There was a significant drop in high levels of parent-child activity between 1988 and 1995 in most activities (see Table SD 1.9.A); for example, 62 percent of mothers reported eating dinner with their child on a daily basis in 1988, but in 1995 only 55 percent reported doing so. Similarly, 50 percent of fathers ate a daily dinner with their child in 1988, but in 1995 this rate dropped to 42 percent. Another example involves the rate at which parents engage their children in private talks. There was a 7 percentage point drop between 1988 and 1995 in the proportion of mothers who had private talks with their children almost every day. Similarly, there was a 5 percentage point drop in the proportion of fathers who had almost daily private talks with their children. Decreases in the amount of time parents spend in activities outside the home and working on projects inside the home were also found.

Differences by Race and Hispanic Origin.¹⁵ In 1995, white (55 percent) and Hispanic mothers (65 percent) were more likely than black mothers (49 percent) to report eating dinner with their child every day (see Table SD 1.9.B). Other racial/ethnic differences were also evident; for example, Hispanic mothers (17 percent) were more likely than white mothers (6 percent) to go on outings with their

¹³Hawes, D. 1996. Who knows who best: A program to stimulate parent-teen interaction. *School Counselor*, 44(2), 115-121.

¹⁴Lamb, M.E. 1997. Fathers and child development: An introductory overview and guide. In M.E. Lamb (Ed.), *The role of the father in child development* (pp. 1-18). New York: John Wiley & Sons, Inc.

¹⁵Estimates of whites and blacks exclude Hispanics of those races.

children almost every day in 1995 (see Table SD 1.9.B). On the other hand, black mothers (50 percent) were more likely than white mothers (38 percent) to help their children with homework or reading almost everyday (see Figure SD 1.9). In general, father involvement in 1995 did not appear to vary by race and Hispanic origin; however, black fathers (11 percent) were more likely than white fathers (4 percent) to take their children on outings almost every day (see Table SD 1.9.B).

Table SD 1.9.A

Percentage of parents in the United States who engage in selected activities with their children ages 5 through 17, by parent and type of activity: 1988 and 1995

	Mothers		Fathers	
	1988	1995	1988	1995
Days per week eat dinner with at least one child				
0 days	2	2	4	3
1-3 days	9	10	13	15
4-6 days	27	33	33	39
Every day	62	55	50	42
Time spent with children in activities away from home				
Never or rarely	6	5	6	5
Once a month or less	15	20	18	24
Several times a month	25	29	25	29
About once a week	23	22	26	20
Several times a week	18	17	15	18
Almost every day	13	7	9	5
Time spent with children at home working on a project				
Never or rarely	4	4	5	3
Once a month or less	9	9	10	13
Several times a month	14	17	17	27
About once a week	14	18	17	17
Several times a week	28	32	33	28
Almost every day	31	20	18	12
Time spent with children having private talks				
Never or rarely	2	2	8	7
Once a month or less	7	7	17	19
Several times a month	14	17	20	23
About once a week	18	22	22	24
Several times a week	29	31	21	21
Almost every day	29	22	11	6
Time spent with children helping with reading or homework				
Never or rarely	9	7	15	10
Once a month or less	6	6	13	13
Several times a month	9	8	17	16
About once a week	11	11	16	16
Several times a week	27	29	26	33
Almost every day	38	40	14	13

Source: The National Survey of Families and Households (NSFH), Wave 1, 1988, and Wave 2, 1995, tabulations by Dr. Randal Day, Washington State University.

Table SD 1.9.B

Percentage of parents in the United States who engage in selected activities with their children ages 5 through 17, by parent, race and Hispanic origin,^a and type of activity: 1995

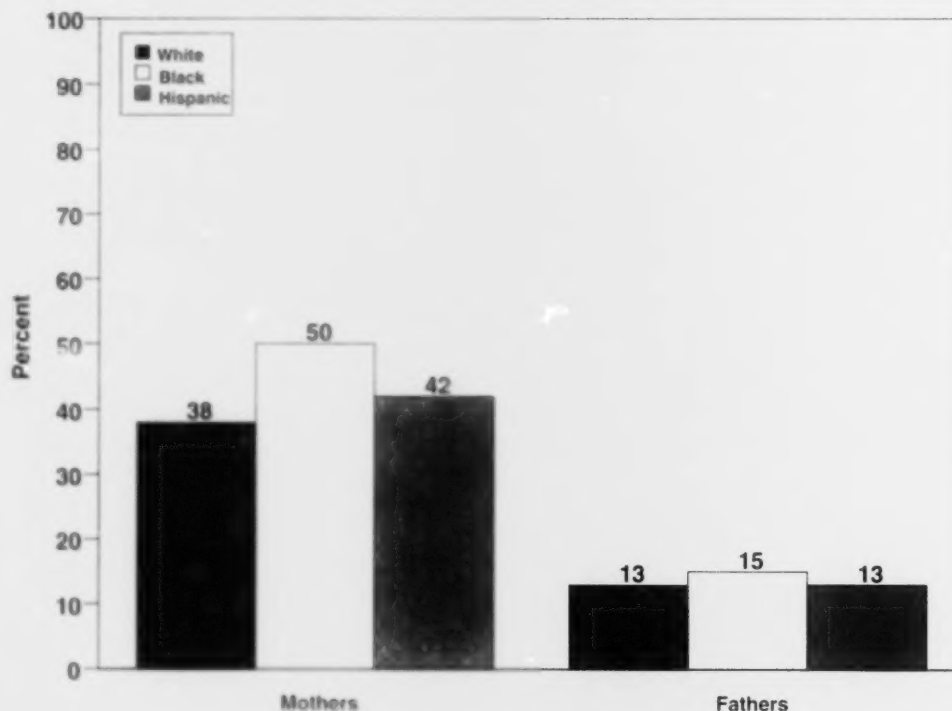
	Mothers			Fathers		
	White	Black	Hispanic ^a	White	Black	Hispanic ^a
Days per week eat dinner with at least one child						
0 days	1	5	1	3	9	2
1-3 days	9	15	9	14	23	19
4-6 days	34	32	24	40	35	37
Every day	55	49	65	43	34	43
Time spent with children in activities away from home						
Never or rarely	4	9	11	4	11	8
Once a month or less	19	22	19	22	26	28
Several times a month	30	27	20	31	26	22
About once a week	23	21	21	21	12	24
Several times a week	19	12	12	19	15	12
Almost every day	6	9	17	4	11	5
Time spent with children at home working on a project						
Never or rarely	3	5	7	2	7	2
Once a month or less	9	8	8	11	23	12
Several times a month	17	21	14	29	18	27
About once a week	18	22	17	18	13	18
Several times a week	34	24	25	28	25	32
Almost every day	19	20	29	12	14	8
Time spent with children having private talks						
Never or rarely	2	2	5	6	10	7
Once a month or less	7	9	7	20	17	17
Several times a month	17	15	18	23	19	23
About once a week	22	22	18	24	26	23
Several times a week	31	30	29	21	22	23
Almost every day	21	22	23	6	7	7
Time spent with children helping with reading or homework						
Never or rarely	7	6	7	9	19	9
Once a month or less	6	5	6	14	9	9
Several times a month	9	7	9	16	14	16
About once a week	11	9	16	15	13	21
Several times a week	31	23	20	33	31	32
Almost every day	38	50	42	13	15	13

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Source: The National Survey of Families and Households (NSFH), Wave 2, 1995, tabulations by Dr. Randal Day, Washington State University.

Figure SD 1.9

Percentage of parents in the United States with children ages 5 through 17 who help their child with homework almost every day, by parent and race and Hispanic origin:^a 1995



^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

Source: The National Survey of Families and Households (NSFH), Wave 2, 1995, tabulations by Dr. Randal Day, Washington State University.

SD 2.1

PHYSICAL FIGHTING BY YOUTH

Physical violence is a major cause of injury and homicide among adolescents.¹⁶ In 1995, almost half of all male students and nearly one third of female students in grades 9 through 12 reported having been involved in a physical fight during the previous year. For males, the percentage that reported involvement in a fight decreased from 51 percent in 1993 to 46 percent in 1995 (see Figure SD 2.1).

Differences by Age. In both 1993 and 1995, the percentage of students who report being involved in fights decreased with age (see Table SD 2.1). In 1995, 47 percent of 9th-grade students and 31 percent of 12th-grade students reported being involved in a fight. It is unclear, however, whether this reduction reflects the effects of increasing maturity, a change in the propensity to report having been in a fight, or a tendency for violence-prone youth to drop out of school, leaving a less violent pool of students in the higher grades.

Differences by Race.¹⁷ In 1995, 36 percent of white students reported involvement in a physical fight within the last year, compared with 42 percent of black students and 48 percent of Hispanic students (see Table SD 2.1).

Table SD 2.1

Percentage of students in grades 9 through 12 in the United States reporting that they have been in a physical fight within the last year, by gender, grade, and race and Hispanic origin: 1993 and 1995

	1993			1995		
	Total	Male	Female	Total	Male	Female
Total	42	51	32	39	46	31
Grade						
9	50	59	41	47	55	37
10	42	52	32	40	46	34
11	41	52	28	37	46	28
12	35	43	27	31	38	24
Race and Hispanic origin ^a						
White, non-Hispanic	40	50	30	36	44	27
Black, non-Hispanic	50	58	42	42	49	35
Hispanic	43	52	34	48	56	40

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

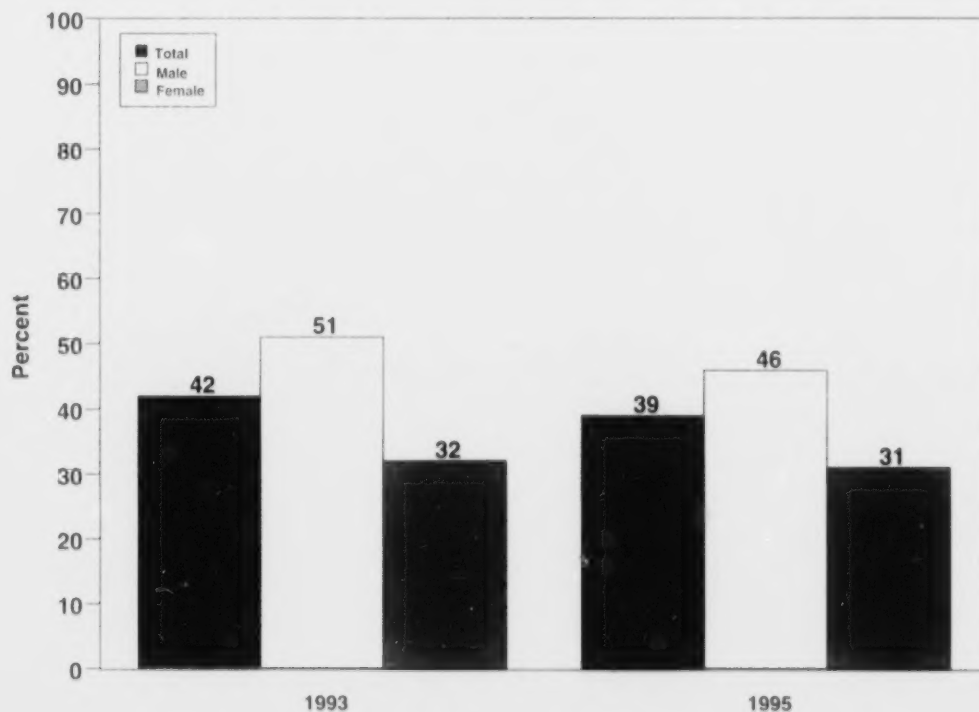
Sources: Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44(SS-1): Table 6; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45(SS-4): Table 6.

¹⁶Injury-related mortality was the leading cause of death for 15- to 19-year-olds in 1995, accounting for 80 percent of all deaths. Injury-related mortality includes death from motor vehicle crashes, fires and burns, drowning, suffocation, and accidents caused by firearms and other explosive materials, among others. The rate of death from homicide for youth ages 15 through 19 more than doubled between 1970 and 1994. (See, for injury-related and homicide mortality, the report section "Health Conditions and Health Care"). See also: University of California at Los Angeles, CDC (Centers for Disease Control and Prevention). "The Epidemiology of Homicide in Los Angeles, 1970-79." Atlanta: U.S. Department of Health and Human Services, Public Health Service, CDC, 1985. Cited in *Chronic Disease and Health Promotion, Reprints from the Morbidity and Mortality Weekly Report: 1990-1991 Youth Risk Behavior Surveillance System*. Atlanta: U.S. Department of Health and Human Services, Public Health Service, CDC, 1992. p. 37.

¹⁷Estimates for whites and blacks exclude Hispanics of those races.

Figure SD 2.1

Percentage of students in grades 9 through 12 in the United States reporting that they have been in a physical fight within the last year, by gender: 1993 and 1995.



Sources: Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44(SS-1): Table 6; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45(SS-4): Table 6.

SD 2.2

WEAPON CARRYING AMONG HIGH SCHOOL YOUTH

Weapon carrying is associated with the most serious injuries resulting from violence. Carrying a weapon significantly increases the risk that a violent argument will result in death, disability, or other serious injury.¹⁸

Since 1991, the percentage of students who report carrying weapons has declined; for example, in 1995, 20 percent of students in grades 9 through 12 reported carrying a weapon, compared with 22 percent in 1993 and 26 percent in 1991 (see Table SD 2.2A). The definition of weapon includes knives, razors, clubs, and handguns and other firearms.

Differences by Age. In general, students in the lower grades are more likely than students in the upper grades to carry a weapon. In 1995, 23 percent of 9th graders reported having carried a weapon in the last 30 days, compared with 16 percent of 12th graders.

Differences by Gender. High school males are much more likely than females to carry a weapon. This is true across all grades and for all racial and ethnic groups (see Figure SD 2.2.A); for example, in 1995, 31 percent of males in grades 9 through 12 reported carrying a weapon, compared with 8 percent of all females in grades 9 through 12.

Differences by Race and Hispanic Origin.¹⁹ In 1995, 19 percent of white, 22 percent of black, and 25 percent of Hispanic teens reported having carried a weapon. For white and black students, these represent reductions from 1991 rates of 25 and 33 percent, respectively.

Youth Who Report Carrying a Gun. In both 1993 and 1995, 8 percent of high school students report having carried a gun at some time in the last 30 days. In 1995, 11 percent of black and Hispanic students and 6 percent of white students reported carrying a gun (see Table SD 2.2.B).

¹⁸"Measuring the Health Behavior of Adolescents: The Youth Risk Behavior Surveillance System and Recent Public Health Reports on High-Risk Adolescents." *Public Health Reports* 108(Supp. 1). Rockville, Md.: Public Health Service, 1993.

¹⁹Estimates for whites and blacks exclude Hispanics of those races.

Table SD 2.2.A

Percentage of students in grades 9 through 12 in the United States who report having carried a weapon^a at least once within the last 30 days, by gender, grade, and race and Hispanic origin: 1991, 1993, and 1995

	1991			1993			1995		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	26	41	11	22	34	9	20	31	8
Grade									
9	28	44	10	26	39	11	23	34	9
10	27	42	11	21	33	10	21	32	9
11	29	44	13	22	33	9	20	32	8
12	21	33	10	20	33	7	16	26	6
Race and Hispanic origin^a									
White, non-Hispanic	25	41	8	21	33	7	19	31	6
Black, non-Hispanic	33	43	24	29	38	19	22	30	16
Hispanic	26	40	13	24	37	12	25	37	13

^aWeapons include knives, razors, clubs, and firearms (including handguns). - ^bEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1991: Centers for Disease Control and Prevention. 1990-1991 Youth Risk Behavior Surveillance System (YRBSS). In *Chronic Disease and Health Promotion Reporting from the MMWR*, Table 2, p. 68; Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44(SS-1): Table 4; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45(SS-4): Table 4.

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Table SD 2.2.B

Percentage of students in grades 9 through 12 in the United States who report having carried a gun at least once within the last 30 days, by gender, grade, and race and Hispanic origin: 1993 and 1995

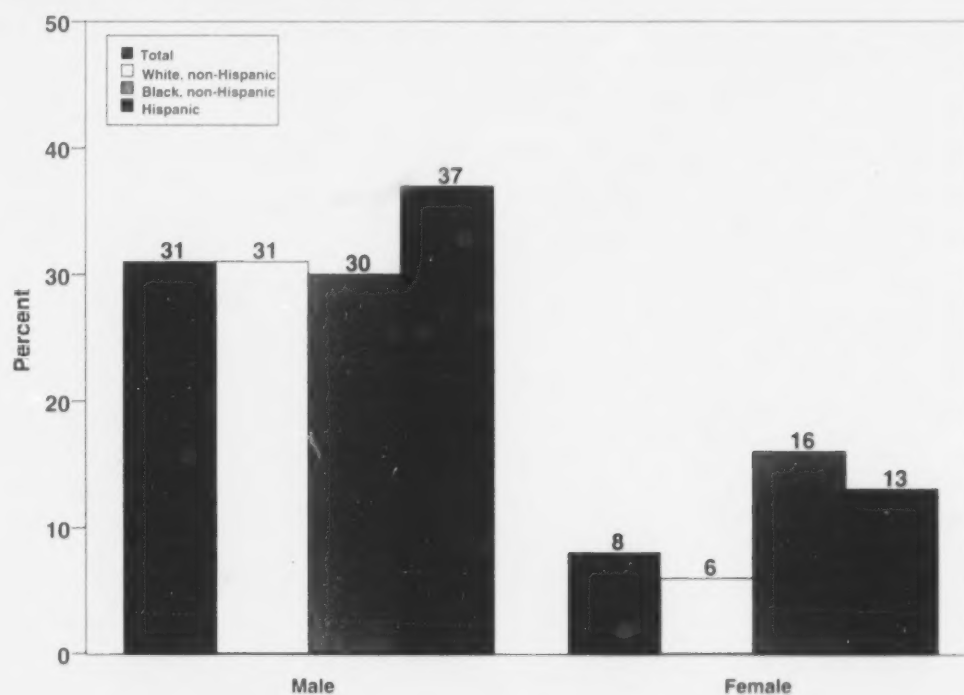
	1993			1995		
	Total	Male	Female	Total	Male	Female
Total	8	14	2	8	12	3
Grade						
9	9	16	2	9	14	3
10	9	15	2	8	13	3
11	7	13	1	7	12	1
12	7	12	1	6	11	2
Race and Hispanic origin^a						
White, non-Hispanic	7	12	1	6	10	2
Black, non-Hispanic	12	21	4	11	19	4
Hispanic	10	17	3	11	17	5

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44(SS-1): Table 4; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45(SS-4): Table 4.

Figure SD 2.2.A

Percentage of students in grades 9 through 12 in the United States who report having carried a weapon^a at least once within the last 30 days, by gender and by race and Hispanic origin:^b 1995



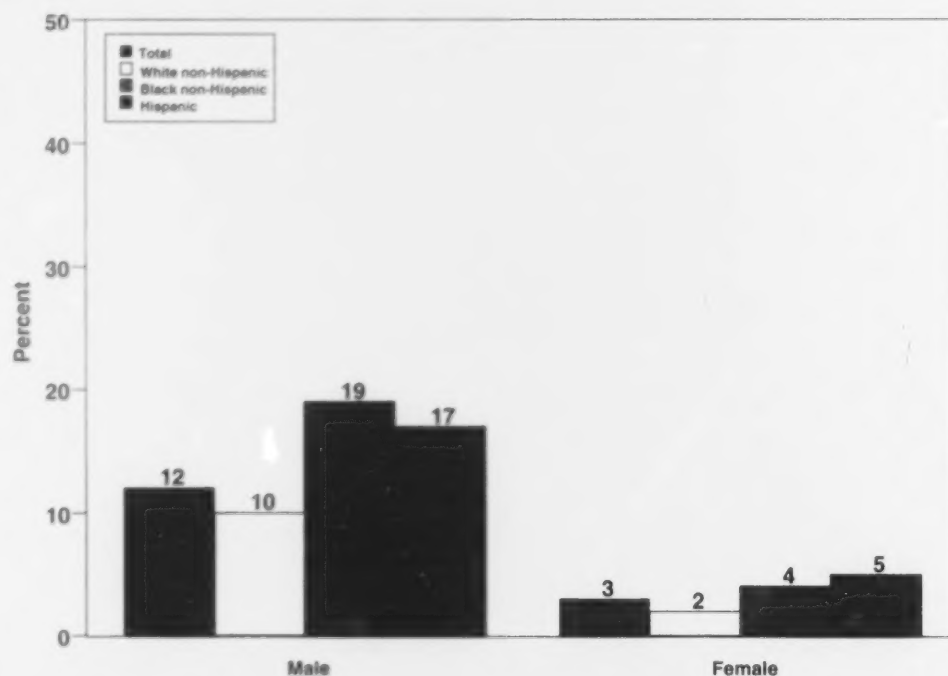
^aWeapons include knives, razors, clubs, and firearms (including handguns).

^bEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1991: Centers for Disease Control and Prevention. 1990-1991 Youth Risk Behavior Surveillance System (YRBSS). In *Chronic Disease and Health Promotion Reporting from the MMWR*, Table 2, p. 68; Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44(SS-1): Table 4; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45(SS-4): Table 4.

Figure SD 2.2.B

Percentage of students in grades 9 through 12 in the United States who report having carried a gun at least once within the last 30 days, by gender and by race and Hispanic origin:^a 1995



^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44(SS-1): Table 4; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45(SS-4): Table 4.

SD 2.3

SEAT BELT USE

Motor vehicle crashes are among the leading causes of injury-related mortality²⁰ for 15- to 19-year-olds, accounting for approximately 40 percent of all teenage injury deaths in 1995.²¹ Motor vehicle crashes are also the leading cause of death for younger children.²² Consistent use of seat belts and child safety seats dramatically lessens the risk of injury or death in a motor vehicle crash. Yet the National Highway Traffic Safety Administration estimates that in 1993, 55 percent of all children under age 5 who were killed while occupants of a motor vehicle were not protected by seat belts or child safety seats.²³

Overall, regular seat belt or child safety seat use among children increased between 1985 and 1990. This increase has been particularly dramatic among children ages 5 and older (see Table SD 2.3.A); for example, among children ages 5 through 9, reported rates of regular seat belt use increased from 49 percent to 76 percent.

Differences by Age. In both 1985 and 1990, younger children were more likely than older children to routinely wear a seat belt or be in a child safety seat. In 1990, 87 percent of children ages 1 through 4 were reported to have used seat belts (or a child safety seat) all or most of the time, compared with 68 percent of 15- through 17-year-olds (see Figure SD 2.3); however, as mentioned above, the greatest increases in seat belt usage occurred among children ages 5 through 17. In fact, the older the age group, the greater the increase in the percentage who regularly wore their seat belts.

Differences by Race. Among children age 4 and under, there has been an increase in the percentage of both white and black children who are regularly in child safety seats (or, for some of the older or larger preschoolers, wearing seat belts). Between 1985 and 1990, the percentage of white children in this age group who regularly were in a child safety seat or wore a seat belt rose from 84 percent to 88 percent. Among black children in this age group, the percentage increased from 67 percent to 79 percent. The percentage of Hispanic children age 4 and under who regularly used a seat belt or child safety seat was fairly steady at 73 percent and 71 percent in 1985 and 1990, respectively. For children ages 5 through 17, however, percentages for all three races rose considerably between 1985 and 1990 (see Table SD 2.3.A).

The 1985 and 1990 data described above and presented in Table SD 2.3.A are based on parent and self reports; data for 1994, presented in Table SD 2.3.B, are based on observations and thus cannot be directly compared with the earlier data; however, the observational results suggest that the percentages of children under 5 who are in child safety seats or are wearing seat belts is much lower than the percentages suggested from the self reports in 1985 and 1990.

²⁰Injury-related mortality was the leading cause of death for 15- to 19-year-old teenagers in 1995, accounting for 80 percent of all deaths. Injury-related mortality includes death from motor vehicle crashes, fires and burns, drowning, suffocation, and accidents caused by firearms and other explosive materials, among others. See "Health Conditions and Health Care," section 3 of this report.

²¹National Center for Health Statistics. 1995 Detail Mortality File. Unpublished data.

²²Ibid.

²³National Highway Traffic Safety Administration. 1994. *Traffic Safety Facts 1993*. DOT HS 808 169. Washington, D.C.: U.S. Department of Transportation.

Table SD 2.3.A

Percentage of children and youth in the United States reported to have worn a seat belt or been placed in a child safety seat all or most of the time, by age and by race and Hispanic origin: 1985 and 1990

	1985	1990
Children and youth by age		
Under age 1	92	93
Ages 1-4	82	87
Ages 5-9	49	76
Ages 10-14	33	67
Ages 15-17	31	68
Race and Hispanic origin^a by age		
White		
Under age 5	84	88
Ages 5-17	40	73
Black		
Under age 5	67	79
Ages 5-17	32	59
Hispanic		
Under age 5	73	71
Ages 5-17	36	62

^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1985: Schoenborn, C.A. "Health Promotion and Disease Prevention: United States, 1985." National Center for Health Statistics. *Vital Health Statistics Series No. 10* (163), February 1988; Data for 1990: Piam, A., and Schoenborn, C.A. "Health Promotion and Disease Prevention: United States, 1990." National Center for Health Statistics. *Vital Health Statistics Series No. 10* (185), April 1993.

Table SD 2.3.B

Percentage of children and youth in the United States who are observed to have worn a seat belt or been placed in a child safety seat, by age:^a 1994

Children and Youth by Age	1994
Infant (Under age 1) ^b	88
Toddler (1-4 years) ^c	61
Youth (5-15 years)	58
Young adult (16-24 years)	53

^aAge group is based on the best judgment of the observers in the National Occupant Protection Use Survey (NOPUS) Controlled Intersection Study.

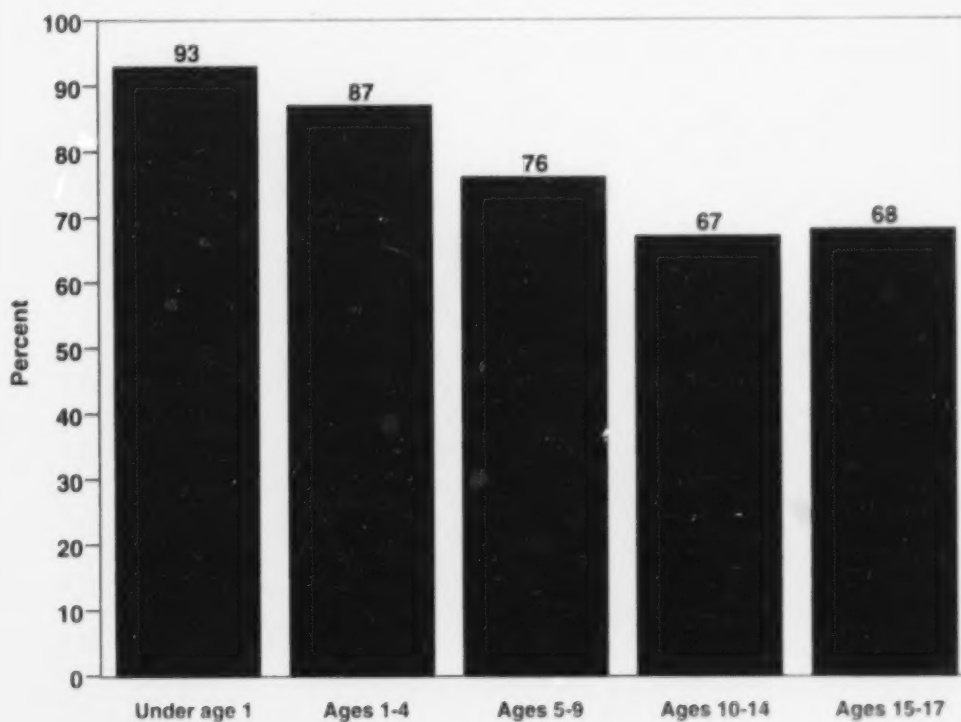
^bUse of restraints for infants refers to child safety seats.

^cUse of restraints for toddlers refers to safety belts or child safety seats.

Source: Research Note. "National Occupant Protection Use Survey: Controlled Intersection Study." National Highway Traffic Safety Administration, U.S. Department of Transportation, May 1, 1995.

Figure SD 2.3

Percentage of children and youth in the United States reported to have worn a seat belt or been placed in a child safety seat all or most of the time, by age: 1990



Sources: Data for 1985: Schoenborn, C.A. "Health Promotion and Disease Prevention: United States, 1985." National Center for Health Statistics. *Vital Health Statistics Series No. 10* (163), February 1988; Data for 1990: Piani, A., and Schoenborn, C.A. "Health Promotion and Disease Prevention: United States, 1990." National Center for Health Statistics. *Vital Health Statistics Series No. 10* (185), April 1993.

SD 2.4

REGULAR PHYSICAL EXERCISE

Sixty (60) percent of Americans do not exercise regularly according to a 1996 report by the surgeon general, despite the many health benefits associated with physical activity.²⁴ People of all ages, both male and female, benefit from regular physical activity. Significant health benefits can be obtained by including a moderate amount of physical activity (e.g., 30 minutes of brisk walking or raking leaves, 15 minutes of running, or 45 minutes of playing volleyball) on most, if not all, days of the week.

The percentage of 12th-grade students who report actively participating in sports or exercise "almost every day" has remained fairly stable since 1976, varying between 44 and 48 percent. Rates have also been stable for 8th- and 10th-grade students since 1991, the first year in which data were collected for those grades (see Table SD 2.4.A).

Differences by Age. The percentages of students who report that they actively participate in sports or exercise "almost every day" decreased with age. In 1996, for example, 54 percent of 8th-graders, 52 percent of 10th graders, and 45 percent of 12th-graders reported daily or almost daily exercise (see Figure SD 2.4). A similar pattern emerged in a survey that asked teens whether they had exercised vigorously three or more times in the past week (see Table SD 2.4.B).

Differences by Gender. Males consistently report exercising or participating in sports more often than females. In 1996, for each age group, male rates were 16 to 26 percentage points higher than female rates, a trend that exists for nearly every year that data are available (see Table SD 2.4.A).

Differences by Race. Black and white students in the 8th- and 10th-grade are about equally likely to exercise regularly (see Table SD 2.4.A). Among 12th-grade students, blacks appeared to be less likely than whites to exercise regularly during most years in the 1990s. Other survey data, reported in Table SD 2.4.B, show larger differences by race and Hispanic origin. In 1995, 67 percent of non-Hispanic white teens reported exercising vigorously at least three times a week, compared with 53 percent of non-Hispanic black teens and 57 percent of Hispanic teens.

²⁴U.S. Department of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.

Table SD 2.4.A

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report that they actively participate in sports or exercise "almost every day," by gender and race: selected years, 1976-1996

	1976	1981	1986	1991	1992	1993	1994	1995	1996
8th Grade									
Total	—	—	—	57	55	55	53	56	54
Gender									
Male	—	—	—	65	65	65	63	66	63
Female	—	—	—	49	45	46	44	47	47
Race									
White	—	—	—	58	56	58	56	59	57
Black	—	—	—	61	57	54	52	55	56
10th Grade									
Total	—	—	—	54	54	53	53	53	52
Gender									
Male	—	—	—	63	64	62	62	62	60
Female	—	—	—	45	45	45	44	45	44
Race									
White	—	—	—	55	55	54	54	55	53
Black	—	—	—	54	52	56	50	52	53
12th Grade									
Total	44	48	44	46	46	44	45	45	45
Gender									
Male	52	56	54	55	59	55	56	55	58
Female	36	39	36	36	33	33	36	37	32
Race									
White	43	47	46	48	48	46	49	46	48
Black	49	53	43	43	41	39	39	48	40

Sources: Bachman, J.G., Johnston, L.D., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1976, 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. 8th and 10th grade 1991 Questionnaire Forms 1 and 2, item A04E; 1992-1996 Questionnaire Forms 1 and 2, item A03E. 12th grade 1991-1996 Questionnaire Form 2, item A02H.

Table SD 2.4.B

Percentage of students in grades 9 through 12 in the United States who report having exercised vigorously three or more times in the past seven days, by gender, grade, and race and Hispanic origin: 1993 and 1995.

	1993			1995		
	Total	Male	Female	Total	Male	Female
Total	66	75	56	64	74	52
Grade						
9	75	81	68	72	80	62
10	70	77	61	69	79	59
11	63	71	53	60	72	47
12	58	70	45	55	67	42
Race and Hispanic origin ^a						
White, non-Hispanic	68	76	59	67	76	57
Black, non-Hispanic	60	71	49	53	68	41
Hispanic	59	69	50	57	70	45

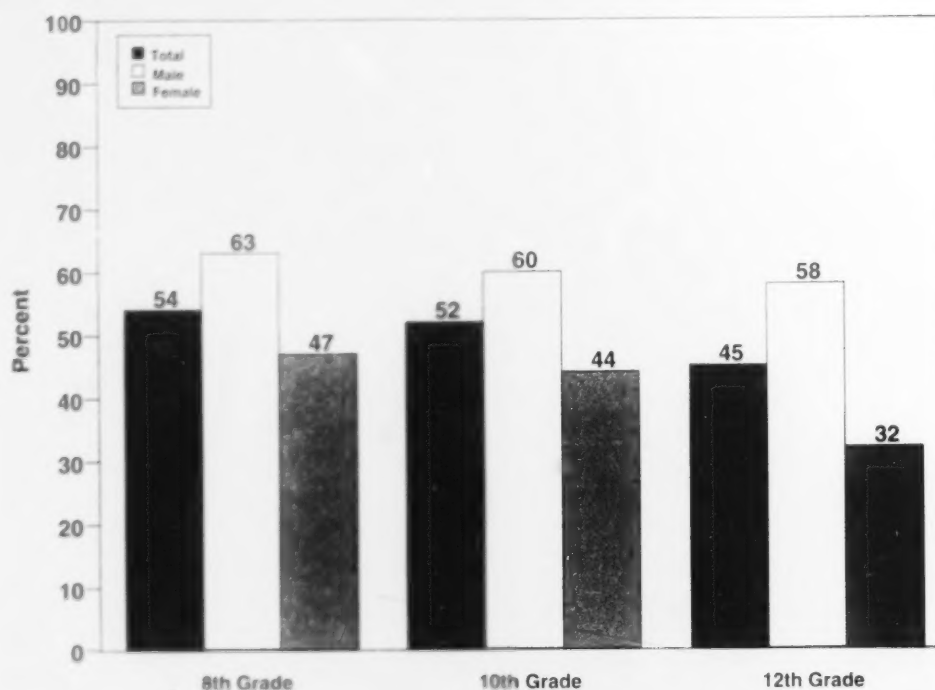
^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Note: Vigorous physical exercise is defined as activities that cause sweating and hard breathing for at least 20 minutes.

Sources: Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44(SS-1): Table 24; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45(SS-4): Table 36.

Figure SD 2.4

Percentage of 8th-, 10th-, and 12th-grade students who report that they actively participate in sports or exercise "almost every day", by gender: 1996



Sources: Bachman, J.G., Johnston, L.D., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1976, 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. 8th and 10th grade 1991 Questionnaire Forms 1 and 2, item A04E; 1992-1996 Questionnaire Forms 1 and 2, item A04E. 12th grade 1991-1996 Questionnaire Form 2, item A02H.

SD 2.5

SUFFICIENT HOURS OF SLEEP

Sufficient hours of sleep on a regular basis is important for optimum functioning throughout the day. Getting enough sleep is also linked to physical health. Individuals who are chronically sleep-deprived may be more susceptible to physical illness and more prone to accidents due to lack of concentration or inattention. Research indicates that sleep loss has a negative effect on motor performance, cognitive function, and mood.²⁵ For adolescents, not getting enough sleep may translate into lower performance in school or may affect socialization.

The number of hours that prove to be sufficient may differ between ages and individuals. A recent survey indicates that males ages 12 through 17 average 65.8 hours of sleep per week and females of the same age average 66.8 hours per week (approximately 9.5 hours of sleep a night for both sexes).²⁶ Analyses based on data from the 1995 National Longitudinal Study of Adolescent Health allow for an examination of youth perceptions of whether they obtain the sleep they need. In 1995, 74.1 percent of youth ages 12 through 17 reported that they got enough sleep (see Table SD 2.5).

Differences by Gender. Adolescent males are more likely to report getting enough sleep than their female peers. In 1995, 76.4 percent of males ages 12 through 17 reported getting enough sleep, compared with 71.8 percent of females.

Differences by Age and Grade. In 1995, approximately four out of every five (82.2 percent) youth ages 12 through 14 reported getting enough sleep, compared with 70.5 percent of youth ages 15 through 17. Similarly, in grades 7 and 8, 83.3 percent of students reported getting enough sleep, compared with 72.5 percent of students in grades 9 and 10, and 66.5 percent of students in grades 11 and 12.

Differences by Family Structure. Lower percentages of adolescents who live with a single father reported getting enough sleep (65.6 percent), compared with adolescents in other living arrangements (see Figure SD 2.5).

²⁵Pilcher, J., and Huffcutt, A. 1996. "Effects of Sleep Deprivation on Performance: A Meta-analysis." *Sleep* 19(4): 318-26.

²⁶Results from the Americans' Use of Time Project, University of Maryland as reported in Robinson, J.P., and Bianchi, S. 1997. "The Children's Hours." *American Demographics* 12.

Table SD 2.5

Percentage of adolescents ages 12 through 17 in the United States who report that they get enough sleep, by gender, age, grade, race and Hispanic origin,^a and family structure: 1995

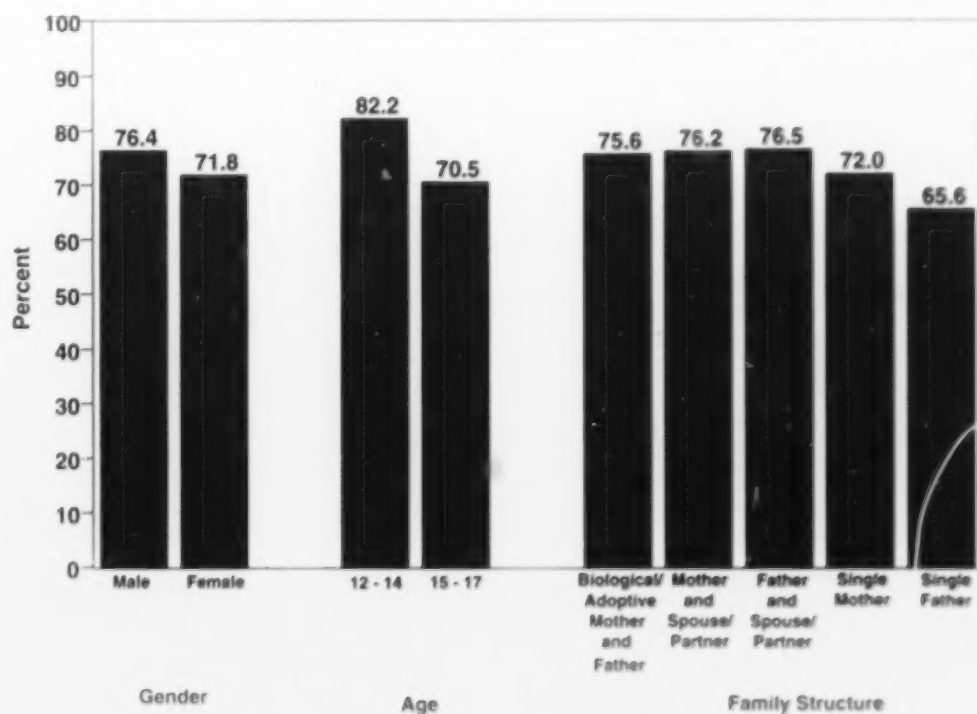
	1995
Total	74.1
Gender	
Male	76.4
Female	71.8
Age	
12-14	82.2
15-17	70.5
Grade	
7-8	83.3
9-10	72.5
11-12	66.5
Race and Hispanic Origin^a	
White, non-Hispanic	75.3
Black, non-Hispanic	72.8
Hispanic	73.5
Family Structure	
Biological/Adoptive Mother and Father	75.6
Mother and Spouse/Partner	76.2
Father and Spouse/Partner	76.5
Single Mother	72.0
Single Father	65.6

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Source: The National Longitudinal Study of Adolescent Health (Add Health) Wave 1, 1995, tabulations by Child Trends, Inc.

Figure SD 2.5

Percentage of adolescents ages 12 through 17 in the United States who report that they get enough sleep, by gender, age, and family structure: 1995



Source: The National Longitudinal Study of Adolescent Health (Add Health) Wave 1, 1995; tabulations by Child Trends, Inc.

SD 3.1

CIGARETTE SMOKING AMONG YOUTH

Cigarette smoking is the single most preventable cause of death in the United States. The Centers for Disease Control and Prevention estimates that one in five deaths is caused by tobacco use.²⁷ Youthful smoking can have severe, lifelong consequences because a large proportion of those who initiate smoking in adolescence will continue to smoke as adults.²⁸ In addition, youth who smoke are also more likely to use illicit drugs and to drink more heavily than their peers who do not smoke.²⁹

There are an estimated 3 million underage smokers in the United States. They purchase 947 million packs of cigarettes and 26 million cans of smokeless tobacco each year, resulting in \$1.26 billion in tobacco sales.³⁰ A 1992 study by the CDC concluded that more than half of underage smokers buy their own cigarettes.³¹ Although studies also show that only 23 percent of smoking youth now use vending machines often or occasionally, anticipated changes in state enforcement of minors' access laws may increase the number of underage smokers who use tobacco vending machines.

Data from two in-school national surveys, the Youth Risk Behavior Surveillance Survey and the Monitoring the Future Study, indicate that smoking among youth has increased in recent years.

- Daily smoking among 12th-grade students had decreased sharply in the late 1970s but has begun to increase again in recent years, as reflected by the Monitoring the Future Study. Between 1992 and 1997, the percentage of 12th graders who reported smoking daily increased from 17.2 percent to 24.6 percent (see Figure SD 3.1).
- Data for 8th- and 10th-grade students, available from 1991 through 1997, also show recent increases in the percentage of students who reported smoking daily, although improvements are indicated in 1997. Among 8th-grade students, the rate increased from 7.2 percent to 10.4 percent between 1991 and 1996, and decreased to 9 percent in 1997. Among 10th-grade students, the rate increased from 12.6 percent to 18.3 between 1991 and 1996 and remained at 18 percent in 1997 (see Table SD 3.1.A).
- Increases in the prevalence of current smoking among youth are also reflected in the results from the Youth Risk Behavior Surveillance Survey, which examines "current smoking," or smoking on one or more of the previous 30 days (see Table SD 3.1.B).

Differences by Age. In general, as age and/or grade increases, so does the prevalence of smoking. In 1997, the percentage of students who report daily smoking was 9 percent among 8th graders, 18 percent among 10th graders, and 24.6 percent among 12th-grade students (see Figure SD 3.1).

Differences by Race and Hispanic Origin.³² White students consistently have the highest rates of smoking, while black students consistently have the lowest (see Tables SD 3.1.A and SD 3.1.B). The prevalence of current³³ smoking among white students is about twice that of black students. White students are twice as likely as Hispanic students and four times as likely as black students to be frequent³⁴ smokers (see Table SD 3.1.B).

²⁷Centers for Disease Control and Prevention. 1993. "Cigarette Smoking--Attributable Mortality and Years of Potential Life Lost--United States, 1990." *Morbidity and Mortality Weekly Report* 42(33):645-649.

²⁸The Monitoring the Future Study, The University of Michigan. "Cigarette Smoking Rates May Have Peaked among Younger Teens." Press release of December 18, 1997.

²⁹Substance Abuse and Mental Health Services Administration. *Preliminary Estimates from the 1995 National Household Survey on Drug Abuse*. Rockville, Md.: Public Health Service, 1996. 1995 results indicate that youth ages 12 through 17 who smoked were about 8 times as likely to use illicit drugs and 11 times as likely to drink heavily as nonsmoking youths.

³⁰Difranza, J.R., and Tye, J.B. 1990. "Who Profits from Tobacco Sales to Children?" *Journal of the American Medical Association* 263(20):2784B87.

³¹Allen, K., et al. 1993. "Teenage tobacco use: Data Estimates from the Teenage Attitudes and Practices Survey, United States, 1989." *Advance Data* 224:1B20.

³²Estimates reported from the Youth Health Behavior Surveillance System for whites and blacks exclude Hispanics of those races.

³³Current smoking is smoking on 1 or more of the previous 30 days.

³⁴Frequent smoking is smoking on 20 or more of the previous 30 days.

Differences by Gender.³⁵ There is little to no difference in the prevalence of smoking between males and females, with the exception of black youth. Among black youth in grades 9 through 12, black males were more likely than black females in 1995 to report current smoking. This disparity became apparent only in 1995, when current and frequent smoking rates for black males increased over the previous year (see Table SD 3.1.B).

Prevalence of Smoking by Frequency. Two to three times the percentage of students report current smoking (smoking on 1 or more of the previous 30 days) than report frequent smoking (smoking on 20 or more of the previous 30 days) (see Table SD 3.1.B). This is apparent across all grades and for all the race and ethnic groups shown.

³⁵The 1996 National Household Survey on Drug Abuse reports similar rates of cigarette smoking for males and females ages 12 through 17. 1996 responses to questions about use of cigarettes include: 37.2 percent of males and 35.3 percent of females "ever used," 24 percent of both males and females "used in the past year," and 18 percent of males and 19 percent of females "used in the past month." Substance Abuse and Mental Health Services Administration, Office of Applied Statistics. *National Household Survey on Drug Abuse: Population Estimates 1996*, July 1997, Table 14A.

Table SD 3.1.A

Percentage of 8th-, 10th-, and 12th-grade students who report smoking cigarettes daily over the previous 30 days, by gender and by race and Hispanic origin: selected years, 1975-1997

	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997 ^a
Total	—	—	—	—	7.2	7.0	8.3	8.8	9.3	10.4	9.0
Gender											
Male	—	—	—	—	8.1	6.9	8.8	9.5	9.2	10.5	9.0
Female	—	—	—	—	6.2	7.2	7.8	8.0	9.2	10.1	8.7
Race and Hispanic origin^b											
(2-year average) ^c											
White	—	—	—	—	—	7.7	8.8	9.7	10.5	11.7	—
Black	—	—	—	—	—	1.4	1.8	2.6	2.8	3.2	—
Hispanic	—	—	—	—	—	7.3	7.2	9.0	9.2	8.0	—
10th Grade											
Total	—	—	—	—	12.6	12.3	14.2	14.6	16.3	18.3	18.0
Gender											
Male	—	—	—	—	12.4	12.1	13.8	15.2	16.3	18.1	17.2
Female	—	—	—	—	12.5	12.4	14.3	13.7	16.1	18.6	18.5
Race and Hispanic origin^b											
(2-year average) ^c											
White	—	—	—	—	—	14.5	15.3	16.5	17.6	20.0	21.4
Black	—	—	—	—	—	2.8	3.1	3.8	4.7	5.1	5.6
Hispanic	—	—	—	—	—	8.4	8.9	8.1	9.9	11.6	10.8
12th Grade											
Total	26.9	21.3	19.5	19.1	18.5	17.2	19.0	19.4	21.6	22.2	24.6
Gender											
Male	26.9	18.5	17.8	18.6	18.8	17.2	19.4	20.4	21.7	22.2	24.8
Female	26.4	23.5	20.6	19.3	17.9	16.7	18.2	18.1	20.8	21.8	23.6
Race and Hispanic origin^b											
(2-year average) ^c											
White	—	23.9	20.4	21.8	21.5	20.5	21.4	22.9	23.9	25.4	27.8
Black	—	17.4	9.9	5.8	5.1	4.2	4.1	4.9	6.1	7.0	7.2
Hispanic	—	12.8	11.8	10.9	11.5	12.5	11.8	10.6	11.6	12.9	14.0

^aOnly totals by grade are available for 1997.

^bEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

^cEstimates for race and Hispanic origin represent the mean of the specified year and the previous year. Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

Note: Data for 8th and 10th grades available since 1991. ^a

Sources: Johnston, L.D., O'Malley, P.M., and Bachman, J.G. 1997. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health, National Institute on Drug Abuse, NIH Pub. No. 97-4139, Institute for Social Research, The University of Michigan. Tables D-31 and D-32; 1996 data from updated Tables D-31 and D-32, The Monitoring the Future Study, The University of Michigan; Data for 1997: The Monitoring the Future Study, The University of Michigan. "Drug Use among American Teens Shows Some Signs of Leveling after a Long Rise." Press release of December 20, 1997, Table 1c.

Table SD 3.1.B

Percentage of students in grades 9 through 12 in the United States who report current and frequent smoking, by gender, race and Hispanic origin, and grade: 1991, 1993, and 1995

	Current Smoking ^a			Frequent Smoking ^b		
	1991	1993	1995	1991	1993	1995
Total	28	31	35	13	14	16
Male	28	30	35	13	14	16
Female	27	31	34	12	14	16
Race and Hispanic origin^c						
White, non-Hispanic	31	34	38	15	16	20
Male	30	32	37	15	16	18
Female	32	35	40	16	16	21
Black, non-Hispanic	13	15	19	3	5	5
Male	14	16	28	5	5	9
Female	11	14	12	2	4	1
Hispanic	25	29	34	7	8	10
Male	28	30	35	8	9	11
Female	23	27	33	6	7	9
Grade						
9	23	28	31	8	9	10
10	25	28	33	11	13	13
11	32	31	36	16	15	19
12	30	35	38	16	18	21

^aCurrent smoking is smoking on 1 or more of the previous 30 days.

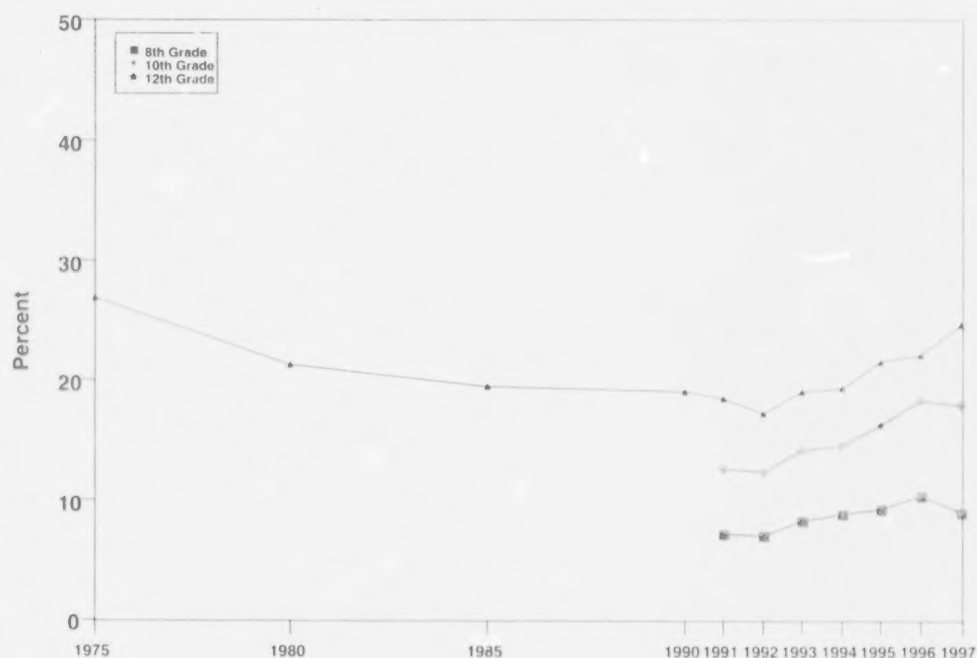
^bFrequent smoking is smoking on 20 or more of the previous 30 days.

^cEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1991: Centers for Disease Control and Prevention. "1990-1991 Youth Risk Behavior Surveillance System." In *Chronic Disease and Health Promotion Reporting from the MMWR*, Table 1, p. 60 (current smoking); Table 1, p. 50 (frequent smoking); Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.L., Ross, J.G., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 12; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.L., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 12.

Figure SD 3.1

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report smoking cigarettes daily over the previous 30 days: selected years, 1975-1997



Sources: Johnston, L.D., O'Malley, P.M., and Bachman, J.G. 1997. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health. National Institute on Drug Abuse, NIH Pub. No. 97-4139, Institute for Social Research, The University of Michigan. Tables D-31 and D-32; 1996 data from updated Tables D-31 and D-32, The Monitoring the Future Study, The University of Michigan; Data for 1997: The Monitoring the Future Study, The University of Michigan. "Drug Use among American Teens Shows Some Signs of Leveling after a Long Rise." Press release of December 20, 1997, Table 1c.

SD 3.2

SMOKELESS TOBACCO USE AMONG YOUTH

The use of smokeless tobacco--snuff and chewing tobacco--is associated with a substantially higher risk of developing oral cancer.³⁶ Data from the Monitoring the Future Study indicate that smokeless tobacco use among youth has generally decreased in recent years. Data from the Youth Risk Behavior Surveillance Survey provide additional information about smokeless tobacco use by males and females within racial and Hispanic groups.

Differences by Age. In general, as age and/or grade increases, so does the prevalence of smokeless tobacco use. In 1997, the percentage of students who report using smokeless tobacco over the previous 30 days was 5.5 percent among 8th graders, 8.9 percent among 10th graders, and 9.7 percent among 12th-grade students (see Table 3.2.A). The rate for 12th-grade students decreased from 12.2 percent in 1995 to 9.7 percent in 1997.

Differences by Gender. While rates of youth cigarette smoking are similar among male and females (see section SD 3.1), male students in 8th, 10th and 12th grades are significantly more likely to use smokeless tobacco than are female students (see Figure 3.2.A). In 1997, among 12th-grade students, 18.7 percent of males and 1.2 percent of females report smokeless tobacco use (see Table 3.2.A).

Differences by Race.³⁷ The use of smokeless tobacco is most prevalent among white youth. In 1997, 12.2 percent of white 12th graders reported having used smokeless tobacco one or more times in the 30 days preceding the survey, compared with 5.3 percent of Hispanic 12th graders and 2.2 percent of black 12th graders (see Table SD 3.2.A). The rate of smokeless tobacco use increases for white students as grade level increases. In 1997, the prevalence of smokeless tobacco use among white students in the 8th-grade was 7.6 percent, 10.4 percent among 10th graders, and 12.2 percent among 12th graders (see Table 3.2.A).

The Youth Risk Behavior Surveillance Survey provides additional subgroup information for 9th-through 12th-grade students combined. According to this survey's most recent administration in 1995, the use of smokeless tobacco is most prevalent among white, non-Hispanic male high school students, with one-quarter reporting having used smokeless tobacco one or more times in the 30 days preceding the survey, compared with 6 percent of Hispanic male youth and 4 percent of black male youth (see Figure SD 3.2.B).

³⁶Public Health Service. 1986. *The Health Consequences of Using Smokeless Tobacco. A Report to the Surgeon General*. DHHS Pub. No. (NIH) 86-2874. U.S. Department of Health and Human Services.

³⁷In Table SD 3.2.B and Figure SD 3.2.B, estimates for whites and blacks exclude Hispanics of those races.

Table SD 3.2.A

Percentage of 8th-, 10th-, and 12th- grade students in the United States who report using smokeless tobacco over the previous 30 days, by grade, gender, and race and Hispanic origin: selected years, 1986-1997

	1986	1989	1992	1993	1994	1995	1996	1997 ^a
8th Grade								
Total	—	—	7.0	6.6	7.7	7.1	7.1	5.5
Gender								
Male	—	—	12.5	10.9	12.8	11.8	11.4	9.9
Female	—	—	2.0	2.7	2.4	2.9	2.9	1.5
Race and Hispanic origin^b								
(2-year average) ^c								
White	—	—	8.3	8.0	8.1	8.9	8.8	7.6
Black	—	—	4.8	2.7	3.2	2.6	2.2	2.6
Hispanic	—	—	4.2	4.0	5.0	5.7	5.2	4.6
10th Grade								
Total	—	—	9.6	10.4	10.5	9.7	8.6	8.9
Gender								
Male	—	—	18.1	19.3	19.2	17.2	15.0	14.9
Female	—	—	1.8	2.0	2.1	2.1	2.3	2.7
Race and Hispanic origin^b								
(2-year average) ^c								
White	—	—	11.4	12.0	12.5	12.0	11.0	10.4
Black	—	—	2.9	2.3	2.3	2.5	2.5	2.8
Hispanic	—	—	6.2	6.1	4.3	3.6	4.0	4.6
12th Grade								
Total	11.5	8.4	11.4	10.7	11.1	12.2	9.8	9.7
Gender								
Male	22.3	15.9	20.8	19.7	20.3	23.6	19.5	18.7
Female	1.6	1.2	2.0	2.3	2.6	1.8	1.1	1.2
Race and Hispanic origin^b								
(2-year average) ^c								
White	—	10.6	—	13.8	13.8	13.8	13.0	12.2
Black	—	4.5	—	2.0	1.9	2.1	2.7	2.2
Hispanic	—	5.1	—	6.0	5.4	7.6	8.1	5.3

^aOnly totals by grade are available for 1997. ^bEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race. ^cEstimates for race and Hispanic origin represent the mean of the specified year and the previous year. Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

Note: Prevalence of smokeless tobacco was not asked of 12th graders in 1990 and 1991. Prior to 1990, the prevalence question on smokeless tobacco was located near the end of one 12th-grade questionnaire form, whereas after 1991, the question was placed in a different and earlier form in the questionnaire. This shift could explain the discontinuities between corresponding data in later years. Data for 8th and 10th grades available since 1991.

Sources: Johnston, L.D., O'Malley, P.M., and Bachman, J.G. 1997. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health. National Institute on Drug Abuse, NIH Pub. No. 97-4139, Institute for Social Research, The University of Michigan. Tables D-33 and D-34; 1996 data from updated Tables D-33 and D-34, *The Monitoring the Future Study*, The University of Michigan; Data for 1997: *The Monitoring the Future Study*, The University of Michigan. "Drug Use among American Teens Shows Some Signs of Leveling after a Long Rise." Press release of December 20, 1997, Table 1b.

Table SD 3.2.B

Percentage of youth in grades 9 through 12 in the United States who report having used smokeless tobacco during the previous 30 days, by gender and by race and Hispanic origin: 1991, 1993, and 1995

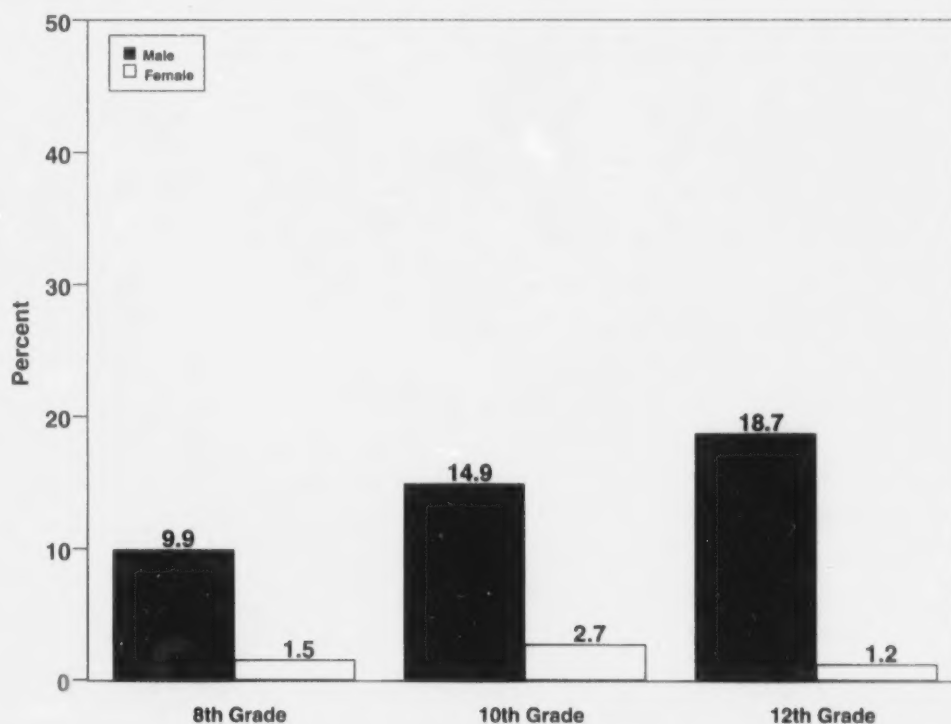
	1991			1993			1995		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	11	19	1	12	20	2	11	20	2
Race and Hispanic origin*									
White, non-Hispanic	13	24	1	15	26	2	15	25	3
Black, non-Hispanic	2	4	1	3	5	1	2	4	1
Hispanic	6	11	1	5	8	2	4	6	3

*Estimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1991: Centers for Disease Control and Prevention. "1990-1991 Youth Risk Behavior Surveillance System." In *Chronic Disease and Health Promotion Reporting from the MMWR*, Table 1, p. 50; Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 12; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 12.

Figure SD 3.2.A

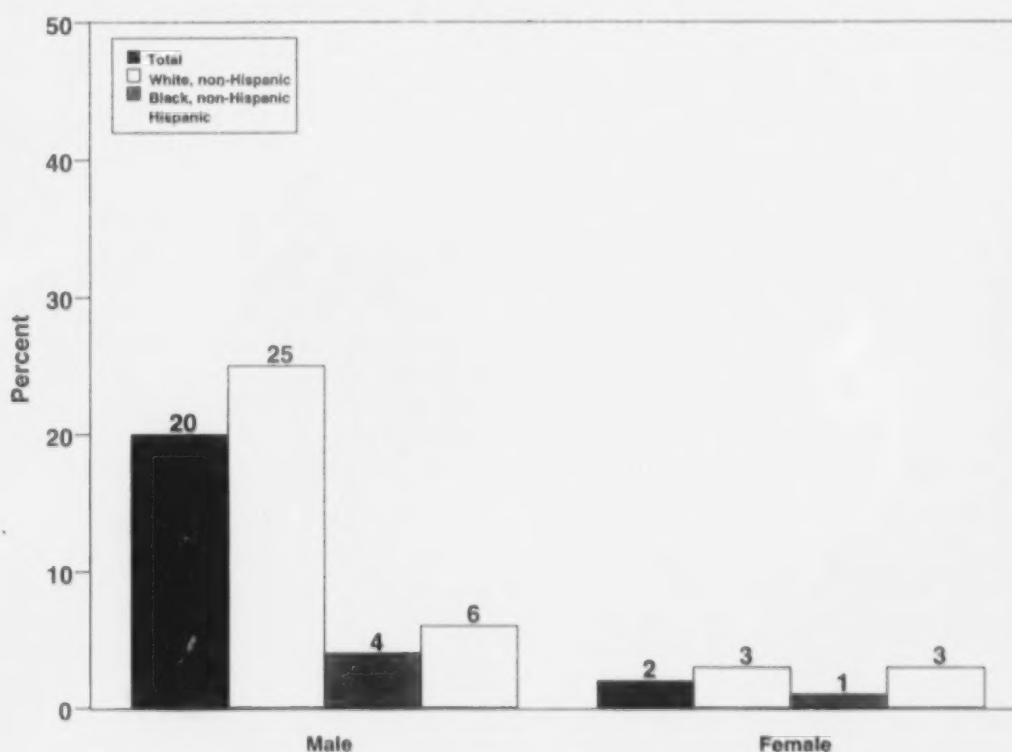
Percentage of 8th-, 10th-, and 12th-grade students in the United States who report using smokeless tobacco during the previous 30 days, by gender: 1997



Sources: Johnston, L.D., O'Malley, P.M., and Bachman, J.G. 1997. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health. National Institute on Drug Abuse, NIH Pub. No. 97-4139, Institute for Social Research, The University of Michigan. Tables D-33 and D-34; 1996 data from updated Tables D-33 and D-34, *The Monitoring the Future Study*, The University of Michigan; Data for 1997: *The Monitoring the Future Study*, The University of Michigan. "Drug Use among American Teens Shows Some Signs of Leveling after a Long Rise." Press release of December 20, 1997, Table 1b.

Figure SD 3.2.B

Percentage of youth in grades 9 through 12 in the United States who report having used smokeless tobacco during the previous 30 days by gender and by race and Hispanic origin,* 1995



*Estimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1991: Centers for Disease Control and Prevention. "1990-1991 Youth Risk Behavior Surveillance System." In *Chronic Disease and Health Promotion Reporting from the MMWR*, Table 1, p. 50; Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.L., Ross, J.G., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 12; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.L., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 12.

SD 3.3

ALCOHOL USE AMONG YOUTH

Alcohol use among adolescents is linked to a host of problems, including motor vehicle crashes and deaths, difficulties in school and the workplace, fighting, and breaking the law.³⁸ A recent report released by the National Institute on Alcohol Abuse and Alcoholism finds that the younger the age of drinking onset, the greater the chance that an individual at some point in life will develop a clinically defined alcohol disorder.³⁹ In addition, binge drinking by youth having five or more drinks in a row at some point in the previous two weeks is associated with higher levels of illicit drug use.⁴⁰

Among 12th-grade students, rates of binge drinking fell from a high of 41.2 percent in 1980 to 27.5 percent in 1993 (see Table SD 3.3.A). Between 1993 and 1997, rates have edged up modestly from 27.5 to 31.3 percent.⁴¹ Regular drinking—having an alcoholic beverage on more than two occasions in the previous 30 days—was a behavior reported by one-half of 12th-grade students in 1980, a figure that has dropped to under one-third in 1996 (see Figure SD 3.3.B).

Differences by Age. Binge drinking increases as students move into the upper grade levels (see Figure SD 3.3.A). In 1997, 14.5 percent of 8th-grade students reported binge drinking, while more than twice this percentage (31.3 percent) reported binge drinking in 12th-grade. The larger increase in binge drinking appears to occur between the 8th- and 10th-grade, rather than in the period between the upper grade levels (see Table SD 3.3.A). Similar grade-level differences exist for regular drinking in 1996, with rates of 11.6 percent for 8th-grade, 20.3 percent for 10th grade, and 30.6 percent for 12th grade (see Table 3.3.B).

Differences by Gender. Male students report higher rates of binge drinking than do female students. The disparity in binge drinking rates between males and females is greater in the upper grades, with 37.9 percent of males and 24.4 percent of females in the 12th grade reporting binge drinking in 1997 (see Table SD 3.3.A). In the case of regular drinking, similar gender disparities exist for 12th grade students in 1996, with 35.5 percent of males and 25.3 percent of females reporting regular drinking in the previous 30 days (see Table SD 3.3.B).

Differences by Race and Hispanic Origin. Hispanic youth in the 8th grade are more likely than their white and black peers to engage in binge drinking. By the 12th grade, however, white students report a higher prevalence of binge drinking than do either Hispanic or black students. Black students consistently report the lowest prevalence of binge drinking for all grades and across all years (see Table SD 3.3.A).

³⁸National Institute on Drug Abuse. *National Trends in Drug Use and Related Factors among American High School Students and Young Adults, 1976-1986*. DHHS Pub. No. (ADM) 87-1535. Washington, D.C.: U.S. Department of Health and Human Services, 1987.

³⁹Grant, B.R., and Dawson, D.A. "Age at Onset of Alcohol Use and Its Association with DSM-IV Alcohol Abuse and Dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey." *Journal of Substance Abuse* 9:103-110. Also, National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism, "Age of Drinking Onset Predicts Future Alcohol Abuse and Dependence." Press release of January 14, 1998.

⁴⁰Substance Abuse and Mental Health Services Administration. *Preliminary Estimates from the 1995 National Household Survey on Drug Abuse*. Rockville, Md.: Public Health Service, 1996. Results from 1995 indicate that among binge drinkers, 18 percent were illicit drug users. In this survey, binge drinking is defined as having five or more drinks on the same occasion at least once in the past month. See also: Gruber, E., Diclemente, R.J., Anderson, M.M., and Lofico, M. 1996. Early Drinking Onset and Its Association with Alcohol Use and Problem Behavior in Late Adolescence. *Preventive Medicine* 25:293-300.

⁴¹These percentages underestimate the rate of binge drinking among all youth, because school-age youth who are not in school are somewhat more likely to binge drink than those in school. (Based on unpublished analyses of the National Health Interview Survey 1992 by Child Trends, Inc., and by unpublished prevalence rates of past-month alcohol use among youths ages 12 through 17 by school status, enrolled or not-enrolled, from the 1994-95 National Household Surveys on Drug Abuse.)

Table SD 3.3.A

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report binge drinking,^a by gender and by race and Hispanic origin: selected years, 1975-1997

	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997 ^b
8th Grade											
Total	—	—	—	—	12.9	13.4	13.5	14.5	14.5	15.6	14.5
Gender											
Male	—	—	—	—	14.3	13.9	14.8	16.0	15.1	16.5	15.3
Female	—	—	—	—	11.4	12.8	12.3	13.0	13.9	14.5	13.5
Race and Hispanic origin ^c											
(2-year average) ^d											
White	—	—	—	—	—	12.7	12.6	12.9	13.9	15.1	15.1
Black	—	—	—	—	—	9.6	10.7	11.8	10.8	10.4	9.8
Hispanic	—	—	—	—	—	20.4	21.4	22.3	22.0	21.0	20.7
10th Grade											
Total	—	—	—	—	22.9	21.1	23.0	23.6	24.0	24.8	25.1
Gender											
Male	—	—	—	—	26.4	23.7	26.5	28.5	26.3	27.2	28.6
Female	—	—	—	—	19.5	18.6	19.3	18.7	21.5	22.3	21.7
Race and Hispanic origin ^c											
(2-year average) ^d											
White	—	—	—	—	—	23.2	23.0	24.5	25.4	26.2	26.9
Black	—	—	—	—	—	15.0	14.8	14.0	13.3	12.2	12.7
Hispanic	—	—	—	—	—	22.9	23.8	24.2	26.8	29.6	27.5
12th Grade											
Total	36.8	41.2	36.7	32.2	29.8	27.9	27.5	28.2	29.8	30.2	31.3
Gender											
Male	49.0	52.1	45.3	39.1	37.8	35.6	34.6	37.0	36.9	37.0	37.9
Female	26.4	30.5	28.2	24.4	21.2	20.3	20.7	20.2	23.0	23.5	24.4
Race and Hispanic origin ^c											
(2-year average) ^d											
White	—	44.3	41.5	36.6	34.6	32.1	31.3	31.5	32.3	33.4	35.1
Black	—	17.7	15.7	14.4	11.7	11.3	12.6	14.4	14.9	15.3	13.4
Hispanic	—	33.1	31.7	25.6	27.9	31.1	27.2	24.3	26.6	27.1	27.6

^aBinge drinking means having five or more drinks in a row in the previous two weeks.

^bOnly totals by grade are available for 1997.

^cEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

^dEstimates for race and Hispanic origin represent the mean of the specified year and the previous year. Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

Note: Data for 8th and 10th grades available since 1991.

Sources: Johnston, L.D., O'Malley, P.M., and Bachman, J.G. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health, National Institute on Drug Abuse, NIH Pub. No. 97-4139, 1997. The Monitoring the Future Study, The University of Michigan, updated Tables D-27 and D-28; Data for 1997: The Monitoring the Future Study, The University of Michigan. "Drug Use among American Teens Shows Some Signs of Leveling after a Long Rise." Press release of December 20, 1997, Table 1c.

Table SD 3.3.B

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report regular drinking,^a by gender: selected years, 1980-1996

	1980	1985	1990	1991	1992	1993 ^b	1994 ^c	1995 ^c	1996 ^c
8th Grade									
Total	—	—	—	9.1	9.8	10.1	11.1	10.5	11.6
Male	—	—	—	10.4	10.7	11.1	12.0	11.6	12.1
Female	—	—	—	7.5	9.0	9.4	10.1	9.4	11.0
10th Grade									
Total	—	—	—	20.3	19.0	20.5	19.9	19.7	20.3
Male	—	—	—	23.4	21.1	23.6	24.0	21.4	23.3
Female	—	—	—	17.4	16.7	17.4	15.8	17.8	17.4
12th Grade									
Total	49.9	42.0	34.3	32.1	29.6	28.2	29.0	30.7	30.6
Male	57.6	48.2	39.9	38.8	35.6	33.3	35.7	36.4	35.5
Female	42.6	36.1	28.1	24.8	23.6	23.1	22.7	25.1	25.3

^aRegular drinking means having an alcoholic beverage on more than two occasions in the previous 30 days.

^bData from 1993 for 8th-, 10th-, and 12-grade students based on a smaller sample size than in other years.

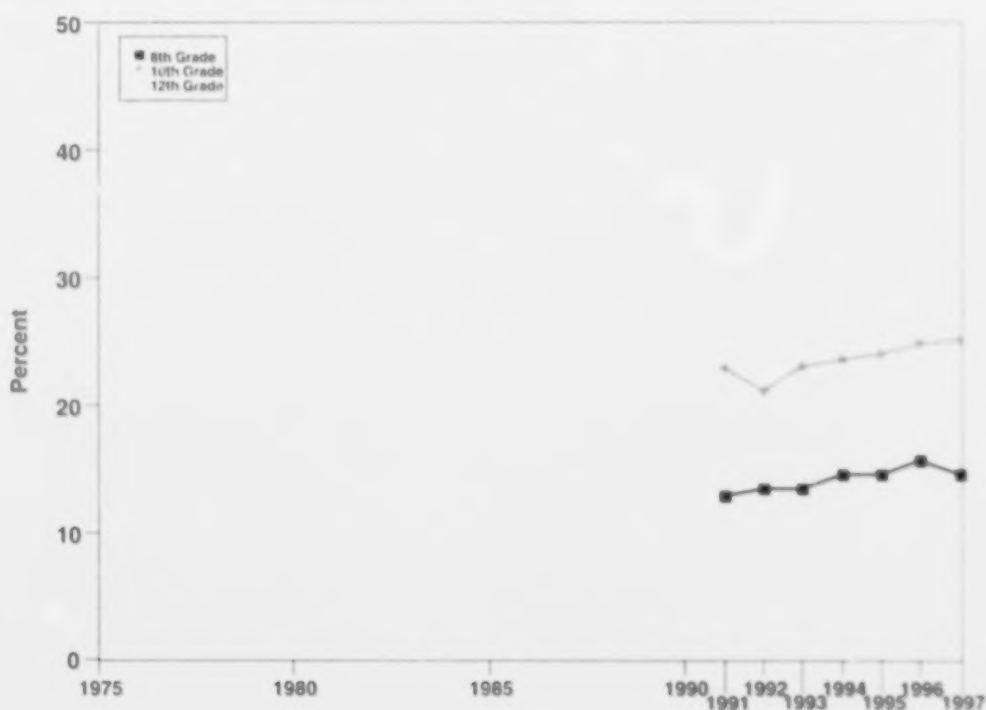
^cData presented for 1994, 1995, and 1996 reflect a slight change in the question text that includes clarification that a drink means "more than just a few sips." Percentages for all grades for 1994, 1995, and 1996 are not directly comparable to previous years.

Note: Data for 8th and 10th grades available since 1991.

Sources: Bachman, J.G., Johnston, L.D., and O'Malley, P.M. "Monitoring the Future: Questionnaire Responses from the National's High School Seniors, Descriptive Results." 1980, 1985 (Questionnaire Forms 1-5); 1990, 1991, 1992 (Questionnaire Forms 1-6); 1993 (Questionnaire Forms 1, 3, 4); and unpublished data from "Monitoring the Future," University of Michigan, 1994-1996 8th and 10th grade results from Questionnaire Forms 1 and 2, item B05C, and 1994-1996 12th grade results from Questionnaire Forms 1-6, item B04c.

Figure SD 3.3.A

Percentage of 8th-, 10th-, and 12th-grade students who report binge drinking:^a selected years, 1975-1997

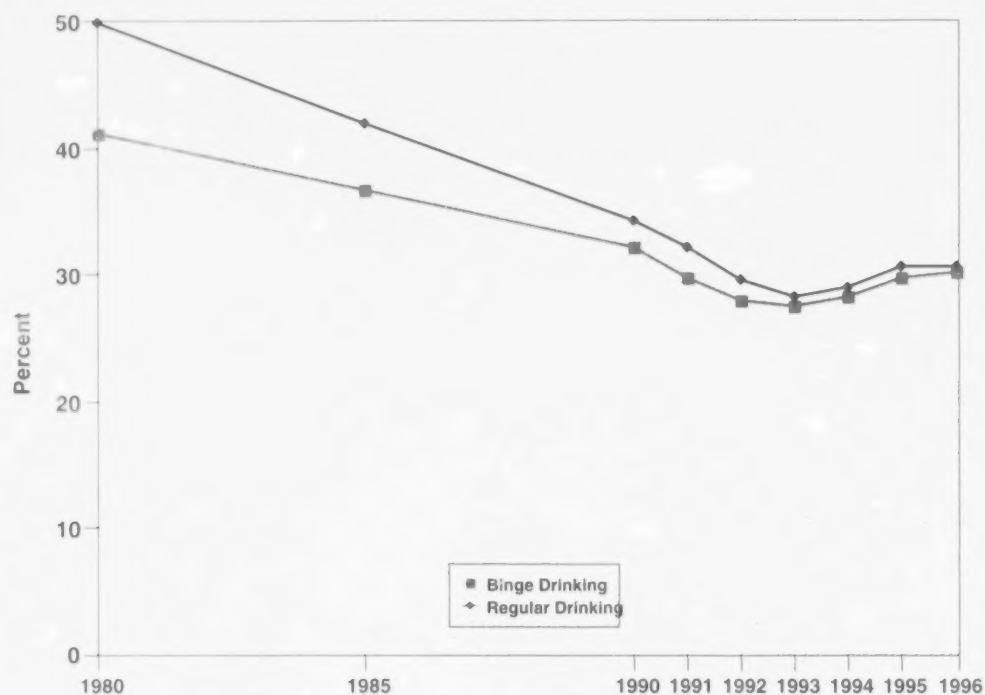


^aBinge drinking means having five or more drinks in a row in the previous two weeks.

Sources: Johnston, L.D., O'Malley, P.M., and Bachman, J.G. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health, National Institute on Drug Abuse, NIH Pub. No. 97-4139, 1997. The Monitoring the Future Study, The University of Michigan, updated Tables D-27 and D-28. Data for 1997: The Monitoring the Future Study, The University of Michigan. "Drug Use among American Teens Shows Some Signs of Leveling after a Long Rise." Press release of December 20, 1997, Table 1c.

Figure SD 3.3.B

Percentage of 12th-grade students in the United States who report binge drinking^a and who report regular drinking:^b selected years, 1980-1996



^aBinge drinking means having five or more drinks in a row in the previous two weeks.

^bRegular drinking means having an alcoholic beverage on more than two occasions in the previous 30 days.

Sources: Bachman, J.G., Johnston, L.D., and O'Malley, P.M. "Monitoring the Future: Questionnaire Responses from the National's High School Seniors, Descriptive Results." 1980, 1985 (Questionnaire Forms 1-5); 1990, 1991, 1992 (Questionnaire Forms 1-6); 1993 (Questionnaire Forms 1, 3, 4); and unpublished data from "Monitoring the Future," University of Michigan, 1994-1996 8th and 10th grade results from Questionnaire Forms 1 and 2, item B05C, and 1994-1996 12th grade results from Questionnaire Forms 1-6, item B04c. Figure SD 3.4, Johnston, L.D., O'Malley, P.M., and Bachman, J.G. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health, National Institute on Drug Abuse, NIH Pub. No. 97-4139, 1997. The Monitoring the Future Study, The University of Michigan, updated Tables D-27 and D-28; Data for 1997: The Monitoring the Future Study, The University of Michigan. "Drug Use among American Teens Shows Some Signs of Leveling after a Long Rise." Press release of December 20, 1997, Table 1c.

SD 3.4

EXPOSURE TO DRUNK DRIVING

Motor vehicle crashes are a major cause of death in the United States for youth ages 13 through 19.⁴² Among young Americans of driving age, the issue of alcohol-impaired driving has particular significance. In all states, the purchase of alcohol by persons under age 21 is illegal; however, in 1994, 29 percent of the 2,610 traffic fatalities involving persons ages 15 through 17 were alcohol-related. For traffic deaths involving persons ages 18 through 20, the percentage of alcohol involvement was 44 percent.⁴³

In 1995, 42 percent of adolescents in grades 9 through 12 reported that within the last month prior to the survey, they had either driven after drinking alcohol or had ridden with a driver who had been drinking alcohol--the same percentage as in 1991, and slightly higher than the 38 percent who reported doing so in 1993 (see Table SD 3.4).

Differences by Age. Rates of exposure to drunk driving differed little by age. In 1995, 46 percent of 12th-grade students reported taking this risk, compared with 39 percent of 9th-grade students (see Figure SD 3.4).

Differences by Gender. In 1995, 43 percent of males and 40 percent of females reported driving after drinking alcohol or riding with someone who had been drinking (see Table SD 3.4).

Differences by Race and Hispanic Origin.⁴⁴ In 1995, 52 percent of Hispanic, 41 percent of white, and 39 percent of black teens reported having been exposed to drunk driving within the last month (see Table SD 3.4).

⁴²Injury-related mortality (including motor vehicle crashes, fires and burns, drowning, suffocation, and accidents caused by firearms and other explosive materials, among others) accounted for 80 percent of all deaths of youth ages 15 through 19 in 1995; however, the rate of motor vehicle crash deaths among youth has been relatively constant since 1992 and has declined as a fraction of all violent deaths to teens. Preliminary data for 1996 show that motor vehicle crashes claimed 28.9 lives per 100,000 youth ages 15 through 19, compared with 43.6 per 100,000 youth in 1970. Data for 1996 are preliminary based on 85 percent of all reported deaths in 1996.

⁴³Update: Alcohol-Related Traffic Crashes and Fatalities among Youth and Young Adults--United States, 1982-1994." *Morbidity and Mortality Weekly Report* 44:869-874.

⁴⁴Estimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Table SD 3.4

Percentage of students in grades 9 through 12 in the United States who report driving after drinking alcohol, or riding with a driver who had been drinking alcohol, within the last 30 days, by gender, grade, and race and Hispanic origin: 1991, 1993, and 1995

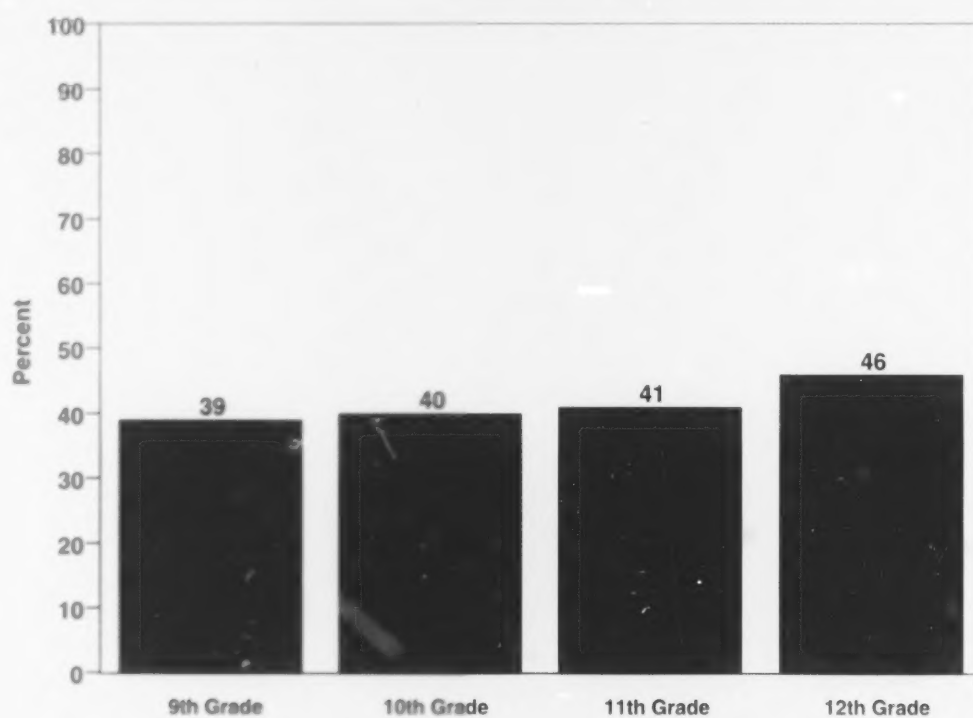
	1991	1993	1995
Total	42	38	42
Gender			
Male	44	40	43
Female	41	36	40
Grade			
9	36	32	39
10	39	37	40
11	45	39	41
12	49	44	46
Race and Hispanic origin^a			
White, non-Hispanic	43	37	41
Black, non-Hispanic	38	41	39
Hispanic	49	45	52

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Source: Youth Risk Behavior Surveillance System survey results, 1991, 1993, and 1995. Unpublished tabulations by Laura Kann, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.

Figure SD 3.4

Percentage of students in grades 9 through 12 in the United States who report driving after drinking alcohol or riding with a driver who had been drinking alcohol within the past 30 days, by grade: 1995



Sources: Youth Risk Behavior Surveillance System survey results, 1991, 1993, and 1995. Unpublished tabulations by Laura Kann, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.

SD 3.5

DRUG USE AMONG YOUTH: MARIJUANA, INHALANTS, HALLUCINOGENS, AND COCAINE

Drug use by youth has serious and often long-term individual, social, and economic consequences. Drug use contributes to crime, decreases economic productivity, and requires a disproportionate share of health care services for those affected. Use of drugs is a preventable behavior that, when established in youth, can extend into adulthood.⁴⁵

The effects of drug use on individual health and well-being have been well documented: for example, the use of cocaine has been linked with numerous health problems ranging from eating disorders to disability and even death from heart attack and stroke.⁴⁶ Marijuana use holds both health and cognitive risks, particularly for damage to pulmonary functions as a result of chronic use.⁴⁷ Hallucinogens can affect brain chemistry and result in problems both in learning new information and retaining knowledge.⁴⁸ And chronic use of some inhalants may result in injury to the liver and kidneys as well as cause neurological damage, although it is not yet determined whether such damage is long-term.⁴⁹

Marijuana Use.⁵⁰ From a high of 33.7 percent in 1980, large and steady declines in the percentage of 12th graders reporting marijuana use were evident until 1992. Since 1992, however, marijuana use among 12th-grade students has increased from 11.9 percent to 23.7 percent by 1997 (see Figure SD 3.5.A). The rise in marijuana use is also evident among 8th-grade students, increasing from 3.2 percent in 1991 to 10.2 percent in 1997. Marijuana use by 10th graders rose from 8.7 percent in 1991 to 20.5 percent by 1997.

Marijuana has consistently been used by higher percentages of 10th and 12th graders than any of the other drugs specified here. As of 1994, marijuana use among 8th-grade students had surpassed prevalence rates of other drugs shown (see Table SD 3.5.A). This increase in the use of marijuana corresponds with a decline in its perceived harmfulness by students across all grade levels from 1991 to 1996.⁵¹

Use of Other Specified Drugs. Increases have also been shown in the use of cocaine and hallucinogens since 1991 across all grade levels. In recent years, cocaine use has been least prevalent in all grade levels, with a high of 2.3 percent of 12th-grade students reporting use within a 30-day period in 1997 (see Figure SD 3.5.B). Hallucinogens have low prevalence rates among 8th graders in 1997 (1.8 percent), although use increases with grade, eventually surpassing the use of inhalants for the upper grade levels. The use of inhalants is highest among 8th-grade students and has increased since 1991, with 5.6 percent reporting use in the past 30 days in 1997 (see Table SD 3.5.A).

⁴⁵Johnson, R.A., Hoffmann, J.P., and Gerstein, D.R. *The Relationship between Family Structure and Adolescent Substance Use*. Rockville, Md.: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, July 1996.

⁴⁶Blanken, A.J. 1993. "Measuring Use of Alcohol and Other Drugs among Adolescents." *Public Health Reports* (Journal of the U.S. Public Health Service) 108 (Supp. 1).

⁴⁷See, for example, "Marijuana: Facts Parents Need to Know," National Institute on Drug Abuse, U.S. Department of Health and Human Services, NCADI Pub. No. PHD712, 1995; and Pope, Harrison G., Jr., and Deborah Yurgelun-Todd, "The Residual Cognitive Effects of Heavy Marijuana Use in College Students," *Journal of the American Medical Association* 275 (7), Feb. 21, 1996.

⁴⁸"Measuring the Health Behavior of Adolescents: The Youth Risk Behavior Surveillance System and Recent Reports on High-Risk Adolescents." *Public Health Reports* 108 (Supp. 1). Rockville, Md.: Public Health Service, 1993.

⁴⁹Ibid.

⁵⁰These percentages likely underestimate the rate of drug use among all youth, because school-age youth who are not in school are somewhat more likely to use drugs than those in school. (Based on unpublished prevalence rates of past-month marijuana use, past-year cocaine use, and past-year inhalant use among youth ages 12 to 17, by school status, enrolled or not-enrolled, from the 1994-95 National Household Surveys on Drug Abuse.)

⁵¹The data on perceived harmfulness of specified drugs are not shown here but can also be obtained from the Monitoring the Future Study. The percentage of students who think that smoking marijuana occasionally or regularly is harmful, physically or in other ways, has dropped by at least 13 percentage points from 1991 to 1996 across all grade levels, according to the Monitoring the Future Study. In 1996, 25.9 percent of 12th-grade students perceived smoking marijuana occasionally to be harmful, and 59.9 percent perceived smoking marijuana regularly to be harmful.

In general, one-quarter (26.2 percent) of America's 12th graders report use of "any illicit drug" in the past 30 days in 1997, with 23.0 percent of 10th graders and 12.9 percent of 8th graders reporting similar recent use (see Table SD 3.5.C).

Differences by Age. As seen with cigarette and alcohol use (see Sections SD 3.1 and SD 3.3), use of both marijuana and hallucinogens increases with grade level. This increase is relatively small for hallucinogen use, but is substantial for marijuana use. In 1997, 10.2 percent of 8th-grade students reported using marijuana in the last 30 days (see Table SD 3.5.A). More than twice that percentage of 12th graders (23.7 percent) reported using marijuana within the last 30 days in the same year. In contrast, inhalant use is more prevalent in the 8th-grade than in either the 10th- or 12th- grade level. The rate of inhalant use among 8th graders was 5.6 percent, compared with 3.0 percent for 10th graders and 2.5 percent for high school seniors in 1997. The prevalence of cocaine use is lowest among 8th graders in 1997 (1.1 percent), but similarly small rates are reflected in other grades as well (2.0 for 10th grade and 2.3 percent for 12th grade) (see Table SD 3.5.A).

Differences by Gender. Male high school students are somewhat more likely than females to report using inhalants, hallucinogens, and cocaine. The largest gender difference is seen in marijuana use and is most apparent in the upper grade levels. Among 8th-grade students, 12.1 percent of males and 10.2 percent of females reported marijuana use within the preceding 30 days of the survey in 1996. In the 10th-grade, males reported marijuana use is about 4 percentage points higher than that of females (22.3 versus 18.6). This gender gap increases to about 7 percentage points among high school seniors in 1996 (25.1 versus 18.3) (see Table SD 3.5.A).

Differences by Race. For each category of drug use shown, as well as for use of any illicit drugs, black students consistently have the lowest rates of use across all grades (see Tables SD 3.5.B and SD 3.5.C).

Table SD 3.5.A

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report having used specified drugs within the previous 30 days, by grade and gender: selected years, 1975-1997

	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997 ^a
Marijuana/Hashish											
8th grade	—	—	—	—	3.2	3.7	5.1	7.8	9.1	11.3	10.2
Male	—	—	—	—	3.8	3.8	6.1	9.5	9.8	12.1	—
Female	—	—	—	—	2.6	3.5	4.1	6.0	8.2	10.2	—
10th grade	—	—	—	—	8.7	8.1	10.9	15.8	17.2	20.4	20.5
Male	—	—	—	—	10.1	9.0	13.1	18.6	19.1	22.3	—
Female	—	—	—	—	7.3	7.1	8.6	12.8	15.0	18.6	—
12th grade	27.1	33.7	25.7	14.0	13.8	11.9	15.5	19.0	21.2	21.9	23.7
Male	32.3	37.8	28.7	16.1	16.1	13.4	18.2	23.0	24.6	25.1	—
Female	22.5	29.1	22.4	11.5	11.2	10.2	12.5	15.1	17.2	18.3	—
Inhalants^b											
8th grade	—	—	—	—	4.4	4.7	5.4	5.6	6.1	5.8	5.6
Male	—	—	—	—	4.0	4.4	4.9	5.4	5.6	4.8	—
Female	—	—	—	—	4.7	4.9	6.0	5.8	6.6	6.6	—
10th grade	—	—	—	—	2.7	2.7	3.3	3.6	3.5	3.3	3.0
Male	—	—	—	—	2.9	2.9	3.7	3.9	3.8	3.4	—
Female	—	—	—	—	2.6	2.6	2.9	3.3	3.2	3.2	—
12th grade	—	1.4	2.2	2.7	2.4	2.3	2.5	2.7	3.2	2.5	2.5
Male	—	1.8	2.8	3.5	3.3	3.0	3.2	3.6	3.9	3.1	—
Female	—	1.0	1.7	2.0	1.6	1.6	1.7	1.9	2.5	2.0	—
Hallucinogens^c											
8th grade	—	—	—	—	0.8	1.1	1.2	1.3	1.7	1.9	1.8
Male	—	—	—	—	0.9	1.1	1.3	1.5	1.8	2.0	—
Female	—	—	—	—	0.7	1.0	1.1	1.0	1.5	1.6	—
10th grade	—	—	—	—	1.6	1.8	1.9	2.4	3.3	2.8	3.3
Male	—	—	—	—	1.8	2.1	2.5	3.0	3.9	3.3	—
Female	—	—	—	—	1.4	1.4	1.3	1.7	2.7	2.3	—
12th grade	4.7	3.7	2.5	2.2	2.2	2.1	2.7	3.1	4.4	3.5	3.9
Male	6.0	4.8	3.4	3.2	3.1	2.9	3.6	4.3	5.8	4.7	—
Female	3.6	2.5	1.4	1.0	1.1	1.4	1.7	1.7	2.7	2.3	—
Cocaine											
8th grade	—	—	—	—	0.5	0.7	0.7	1.0	1.2	1.3	1.1
Male	—	—	—	—	0.7	0.6	0.9	1.2	1.1	1.2	—
Female	—	—	—	—	0.4	0.8	0.6	0.9	1.2	1.4	—
10th grade	—	—	—	—	0.7	0.7	0.9	1.2	1.7	1.7	2.0
Male	—	—	—	—	0.7	0.8	1.2	1.4	1.8	1.8	—
Female	—	—	—	—	0.6	0.6	0.5	0.9	1.5	1.6	—
12th grade	1.9	5.2	6.7	1.9	1.4	1.3	1.3	1.5	1.8	2.0	2.3
Male	2.5	6.0	7.7	2.3	1.7	1.5	1.7	1.9	2.2	2.6	—
Female	1.2	4.3	5.6	1.3	0.9	0.9	0.9	1.1	1.3	1.4	—

^aOnly totals by grade are available for 1997. ^bAll data are unadjusted for underreporting of nitrites. Data for 12th grade only, based on five of six questionnaire forms, with sample size five-sixths of total sample size. ^cAll data are unadjusted for underreporting of PCP.

Note: Data for 8th and 10th grades available since 1991.

Sources: Johnston, L.D., O'Malley, P.M., and Bachman, J.G. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health. National Institute on Drug Abuse, NIH Pub. No. 97-4139, 1997. Institute for Social Research, The University of Michigan. Tables 2-3-12, 3-3-12, 5-3-12, 9-3-12 through 1996; Table 8 through 1995; and Table 4-7 for 1996; Data for 1997: The Monitoring the Future Study, The University of Michigan. "Drug Use among American Teens Shows Some Signs of Leveling after a Long Rise." Press release of December 20, 1997, Table 1b.

Table SD 3.5.B

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report having used specified drugs within the previous 30 days, by race and Hispanic origin: 1992-1996

	8th Grade					10th Grade				
	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Marijuana/Hashish										
White	3.3	4.1	5.6	7.8	10.0	9.0	9.8	13.4	16.8	19.3
Black	2.0	2.9	5.0	6.6	8.0	3.6	4.9	9.8	13.8	15.9
Hispanic ^a	6.4	8.3	12.1	12.9	12.5	10.4	12.4	15.6	17.7	19.1
Inhalants^b										
White	4.7	5.4	6.0	6.6	6.8	2.9	3.2	3.7	3.9	3.9
Black	2.4	2.7	2.8	2.5	2.0	2.0	2.0	1.6	1.3	1.2
Hispanic ^a	5.5	5.6	6.1	6.5	6.4	3.0	3.0	3.4	3.4	2.9
Hallucinogens^c										
White	0.8	1.1	1.3	1.6	2.0	2.0	2.1	2.3	3.1	3.5
Black	0.4	0.4	0.4	0.4	0.5	0.2	0.3	0.7	0.8	0.5
Hispanic ^a	1.9	1.9	1.8	1.9	2.2	1.4	1.8	2.2	2.7	3.0
Cocaine										
White	0.5	0.5	0.7	0.9	1.2	0.7	0.8	0.9	1.4	1.6
Black	0.4	0.4	0.3	0.4	0.4	0.1	0.2	0.6	0.6	0.4
Hispanic ^a	1.7	1.8	2.2	2.5	2.3	1.1	1.2	1.8	2.4	2.9
	12th Grade									
	1992	1993	1994	1995	1996					
Marijuana/Hashish										
White	14.1	14.9	18.4	20.8	22.0					
Black	6.1	8.1	13.1	16.8	18.3					
Hispanic ^a	12.7	12.5	14.9	17.9	19.1					
Inhalants^b										
White	2.4	2.6	2.8	3.3	3.3					
Black	1.5	1.4	1.5	1.4	1.0					
Hispanic ^a	2.5	2.1	2.3	2.3	2.1					
Hallucinogens^c										
White	2.5	2.9	3.3	4.1	4.4					
Black	0.3	0.5	0.8	0.7	0.6					
Hispanic ^a	1.5	1.7	2.0	3.4	4.0					
Cocaine										
White	1.3	1.2	1.3	1.6	1.9					
Black	0.7	0.4	0.5	0.5	0.4					
Hispanic ^a	1.9	2.4	2.3	2.3	3.2					

^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

^bInhalants include substances such as glues and aerosols. Data for 12th-grade students based on five of six forms. Data are unadjusted for known underreporting of nitrates.

^cHallucinogens include substances such as LSD. Data are unadjusted for known underreporting of PCP.

Note: Estimates for race and Hispanic origin represent the mean of the specified year and the previous year. Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

Sources: Johnston, L.D., O'Malley, P.M., and Bachman, J.G. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health. National Institute on Drug Abuse, NIH Pub. No. 97-4139, 1997. Institute for Social Research, The University of Michigan. Table 10, 1992 through 1995; Table 4-9 for 1996.

Table SD 3.5.C

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report having used any illicit drugs^a in the previous 30 days, and 12th-grade reports of illicit drug use by gender and by race and Hispanic origin: selected years, 1985-1997

	1985	1990	1991	1992	1993	1994	1995	1996	1997 ^b
Grade									
8	—	—	5.7	6.8	8.4	10.9	12.4	14.6	12.9
10	—	—	11.6	11.0	14.0	18.5	20.2	23.2	23.0
12	29.7	17.2	16.4	14.4	18.3	21.9	23.8	24.6	26.2
12th Graders									
Gender									
Male	32.1	18.9	18.4	15.9	20.4	25.5	26.8	27.5	28.7
Female	26.7	15.2	14.1	12.7	15.9	18.3	20.4	21.2	23.2
Race and Hispanic origin									
(2-year average)^c									
White	30.2	20.5	18.6	16.8	17.8	21.4	23.8	24.8	26.4
Black	22.9	9.0	7.2	7.3	9.1	14.3	18.3	19.7	20.0
Hispanic ^d	27.2	13.9	14.7	14.6	15.6	18.3	21.4	22.6	23.9

^aFor 12th graders only: Use of "any illicit drug" includes any use of marijuana, LSD, other hallucinogens, crack, other cocaine, or heroin, or any use of other opiates, stimulants, barbiturates, or tranquilizers not under a doctor's orders. For 8th and 10th graders only: The use of other opiates and barbiturates has been excluded, because these younger respondents appear to overreport use (perhaps because they include the use of nonprescription drugs in their answers).

^bOnly totals by grade are available for 1997.

^cEstimates for race and Hispanic origin represent the mean of the specified year and the previous year. Data have been combined to increase subgroup sample sizes, thus providing more stable estimates.

^dEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

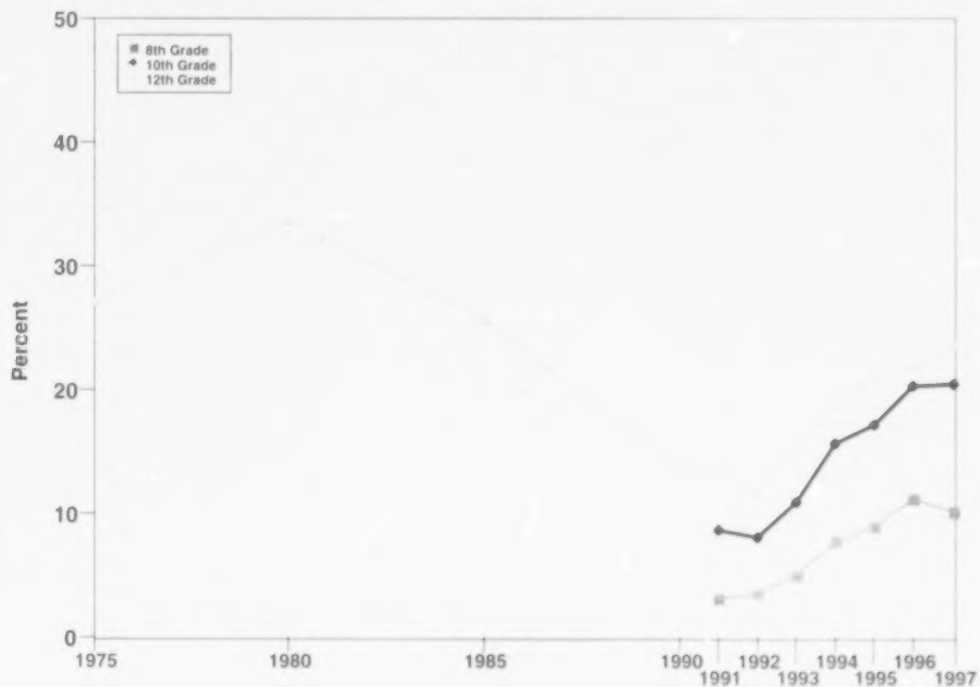
Note: Data for 8th and 10th grades available since 1991.

Sources: Johnston, L.D., O'Malley, P.M., and Bachman, J.G. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health. National Institute on Drug Abuse, NIH Pub. No. 97-4139, 1997. Institute for Social Research, The University of Michigan; Data for 1996: Unpublished tables from the Monitoring the Future Study, provided by project staff; Data for 1997: The Monitoring the Future Study, The University of Michigan. "Drug Use among American Teens Shows Some Signs of Leveling after a Long Rise." Press release of December 20, 1997, Table 5.

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Figure SD 3.5.A

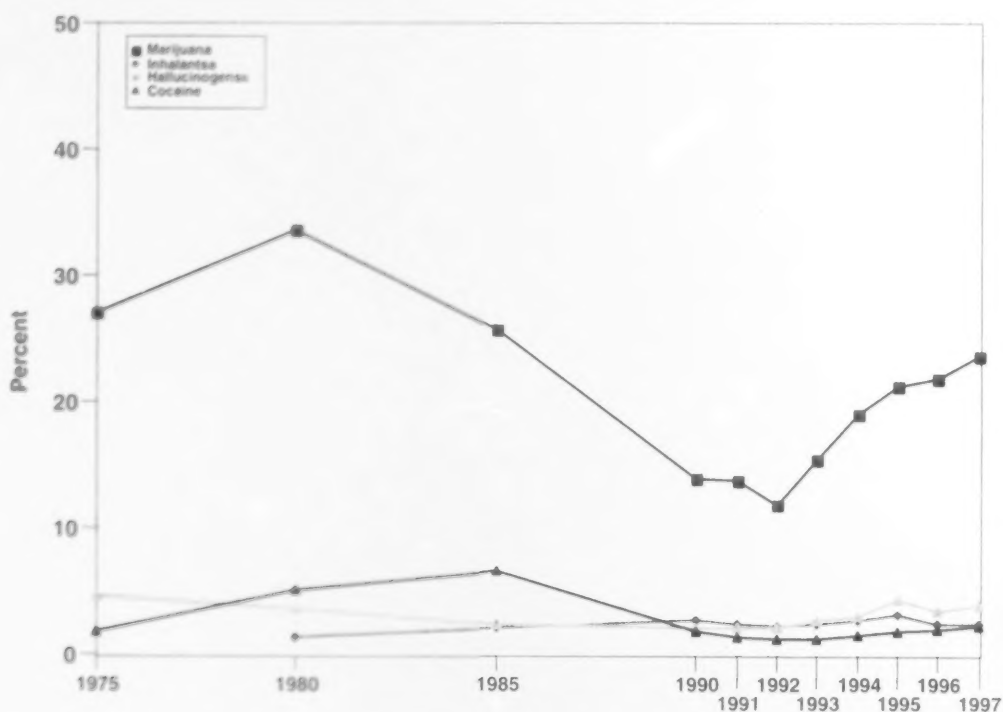
Percentage of 8th-, 10th-, and 12th-grade students in the United States who report having used marijuana within the previous 30 days: selected years, 1975-1997



Sources: Johnston, L.D., O'Malley, P.M., and Bachman, J.G. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health. National Institute on Drug Abuse, NIH Pub. No. 97-4139, 1997. Institute for Social Research, The University of Michigan. Tables 2-3-12, 3-3-12, 5-3-12, 9-3-12 through 1996; Table 8 through 1995; and Table 4-7 for 1996; Data for 1997: The Monitoring the Future Study, The University of Michigan. "Drug Use among American Teens Shows Some Signs of Leveling after a Long Rise." Press release of December 20, 1997, Table 1b.

Figure SD 3.5.B

Percentage of 12th-grade students in the United States who report having used specified drugs within the previous 30 days: selected years, 1975-1997



*All data on inhalants are unadjusted for underreporting of nitrites.

*All data on hallucinogens are unadjusted for underreporting of PCP.

Sources: Johnston, L.D., O'Malley, P.M., and Bachman, J.G. *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. Rockville, Md.: National Institutes of Health, National Institute on Drug Abuse, NIH Pub. No. 97-4139, 1997. Institute for Social Research, The University of Michigan. Tables 2-3-12, 3-3-12, 5-3-12, 9-3-12 through 1996, Table 8 through 1995; and Table 4-7 for 1996; Data for 1997: The Monitoring the Future Study, The University of Michigan. "Drug Use among American Teens Shows Some Signs of Leveling after a Long Rise." Press release of December 20, 1997, Table 1b.

SD 3.6

PEER ATTITUDES TOWARD ALCOHOL, MARIJUANA, COCAINE, AND SMOKING

Drug use is correlated with attitudes and beliefs about drugs, both in terms of perceived health risks and the level of peer disapproval.⁵² As children reach adolescence, peer influences on personal behavior can take on increasing importance in determining the use of drugs, alcohol, and cigarettes.

The majority of high school seniors have long reported peer disapproval of drug and alcohol use and cigarette smoking, as reflected in their responses to questions of the level of disapproval they would receive from their peers for 1) taking one to two drinks nearly every day, 2) smoking marijuana even occasionally (as opposed to trying it once), 3) taking cocaine even occasionally (as opposed to trying it once), and 4) smoking one or more packs of cigarettes per day (see Table SD 3.6).⁵³

Peer disapproval of drinking (one to two drinks nearly every day) and smoking marijuana (even occasionally) among 12th graders increased from 1981 to 1992 to highs of 78 percent and 79 percent, respectively. Disapproval of both these actions began to decline in 1993. By 1996, the percentage of 12th-grade students who reported peer disapproval of drinking was 73 percent, and of smoking marijuana, 63 percent (see Figure SD 3.6). Peer disapproval of smoking cigarettes (one or more packs per day) has also declined since 1992, although disapproval levels had been relatively stable prior to that time. In 1996, 69 percent of 12th graders reported peer disapproval of smoking cigarettes, down from a high of 76 percent in 1992. Peer disapproval of cocaine use (even occasionally) increased from 87 percent in 1986 to 95 percent in 1991 and has remained at about this level. Cocaine use commands the highest level of peer disapproval for every year shown (see Table SD 3.6).

Differences by Gender. Male high school seniors have consistently reported lower levels of peer disapproval of drinking than have their female peers. In 1996, 63 percent of males reported peer disapproval of drinking, compared with 83 percent of females. Disapproval rates for cigarette use were similar for males and females until 1993, when male disapproval began to decrease. Male students also report somewhat lower peer disapproval of smoking marijuana.

Differences by Race. For 1996, rates of disapproval for drug use were generally similar for blacks and whites, with the exception of cigarette smoking. Among blacks, 82 percent reported peer disapproval of smoking, compared with 66 percent among white students.

⁵²Substance Abuse and Mental Health Services Administration. *Preliminary Estimates from the 1995 National Household Survey on Drug Abuse*. Rockville, Md.: Public Health Service, 1996. Also see U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education. "Student Reports of Availability, Peer Approval, and Use of Alcohol, Marijuana, and Other Drugs at School: 1993." *Statistics in Brief*, June 1997.

⁵³All references to drinking, marijuana and cocaine use, and smoking cigarettes throughout this text use the parameters for these activities as defined by the Monitoring the Future questionnaire.

Table SD 3.6

Percentage of 12th-grade students in the United States who report that peers would not approve of their using alcohol, marijuana, cocaine, or cigarettes: selected years, 1981-1996

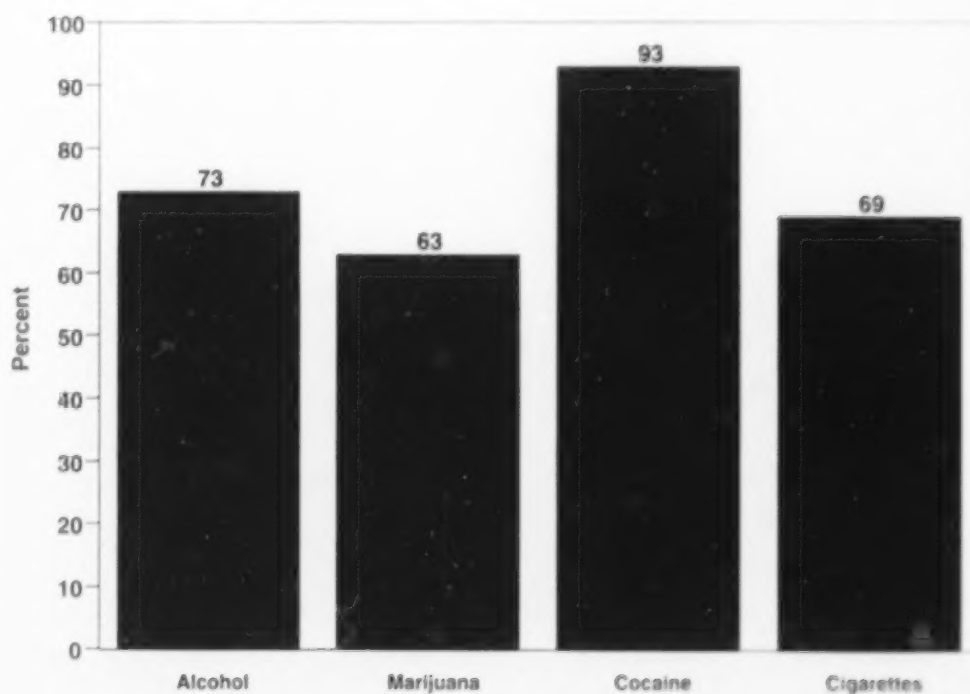
	1981	1986	1991	1992	1993	1994	1995	1996
Disapprove of taking one to two drinks nearly every day								
Total	70	76	77	78	77	76	73	73
Gender								
Male	61	68	68	69	68	67	65	63
Female	79	84	85	85	85	83	80	83
Race								
White	69	75	77	77	76	76	72	71
Black	73	82	80	81	80	78	74	77
Disapprove of smoking marijuana even occasionally								
Total	56	64	76	79	74	69	65	63
Gender								
Male	54	60	73	78	72	63	62	59
Female	58	68	78	80	75	74	69	67
Race								
White	55	63	75	78	73	68	64	62
Black	62	72	86	84	76	70	69	66
Disapprove of taking cocaine even occasionally*								
Total	—	87	95	94	94	94	94	93
Gender								
Male	—	84	93	93	92	91	92	90
Female	—	90	96	96	96	96	95	96
Race								
White	—	88	96	96	95	94	95	93
Black	—	89	97	91	89	94	92	93
Disapprove of smoking one or more packs of cigarettes per day								
Total	74	76	74	76	72	72	69	69
Gender								
Male	74	75	72	76	68	67	65	65
Female	74	77	77	77	75	77	74	73
Race								
White	74	75	72	75	71	69	67	66
Black	75	81	88	82	80	83	81	82

*The question regarding cocaine use was not included prior to 1986.

Source: Johnston, L.D., Bachman, J.G., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. Form 4, items E07A, E07C, E07H, and E07I. Data based on one of six questionnaire forms, with a resulting sample size one-sixth of the total sample size for each year.

Figure SD 3.6

Percentage of 12th-grade students in the United States who report that peers would not approve of their using alcohol, marijuana, cocaine, or cigarettes: 1996



Note: Figure reports students' perceived peer nonapproval rates of use of various drugs: alcohol (taking one to two drinks nearly every day), marijuana (smoking even occasionally), cocaine (use even occasionally), and smoking (one or more packs of cigarettes every day).

Sources: Johnston, L.D., Bachman, J.G., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996. Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. Form 4, items E07A, E07C, E07H, and E07I. Data based on one of six questionnaire forms, with a resulting sample size one-sixth of the total sample size for each year.

SD 3.7

ABUSE OF ALCOHOL OR OTHER CONTROLLED SUBSTANCES

The use of alcohol and other illicit drugs by teens⁵⁴ has been related to numerous social problems, such as delinquency, fighting, and early sexual activity,⁵⁵ and to a variety of short- and long-term health problems.⁵⁶ For many reasons, then, it is important that youth stay free of all such substances.

In 1996, 13 percent of 12- through 17-year-olds reported binge drinking and/or any use of an illicit drug during the previous month (see Table SD 3.7).

Differences by Gender. Rates of reported use vary little by gender. In 1996, 14 percent of males and 11 percent of females ages 12 through 17 reported illicit drug use or binge drinking in the previous month.

Differences by Race and Hispanic Origin.⁵⁷ Rates of reported use differed little among whites, blacks, and Hispanics, ranging from 10 percent to 13 percent in 1996.

Table SD 3.7

Percentage of youth ages 12 through 17 in the United States reporting illicit drug^a use and/or binge drinking^b in the past month, by gender and by race and Hispanic origin: 1994-1996

	1994	1995	1996
Total	13	15	13
Gender			
Male	14	17	14
Female	12	13	11
Race and Hispanic origin^c			
White, non-Hispanic	15	16	13
Black, non-Hispanic	10	12	10
Hispanic	10	13	13

^aIllicit drugs include marijuana, cocaine (including crack), heroin, hallucinogens (including PCP), inhalants, and nonmedical use of psychotherapeutics.

^bBinge drinking includes drinking five or more drinks on the same occasion on one or more days in the past 30 days.

^cEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Source: Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies, Prevalence Branch. Unpublished analyses, National Household Survey on Drug Abuse.

⁵⁴A note on methodology: Throughout this report, we present data from two major federally sponsored surveys of adolescent substance use: the Monitoring the Future Study, a school-based survey, and the National Household Survey on Drug Abuse, a household survey of the population age 12 and older. A recent report finds that rates of drug use obtained were larger in the school survey than in the household survey, possibly because of greater underreporting in the household setting than in the classroom and the different questionnaires used in the two surveys. Groer, J., Wright, D., and Kopstein, A. 1997. "Prevalence of Youth Substance Use: The Impact of Methodological Differences between Two National Surveys." *Drug and Alcohol Dependence* 47:19-30. The tables in this section draw from the Monitoring the Future Survey.

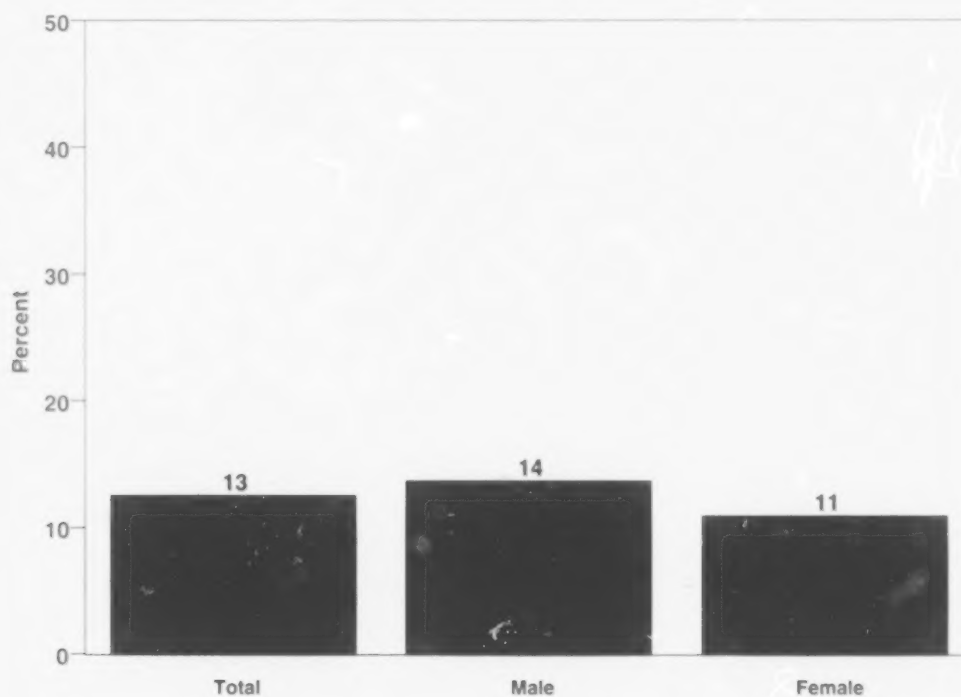
⁵⁵National Institute on Drug Abuse. *National Trends in Drug Use and Related Factors among American High School Students and Young Adults, 1976-1986*. DHHS Pub. No. (ADM) 87-1535. Washington, D.C.: U.S. Department of Health and Human Services, 1987. See also: Grant, B.R., and Dawson, D.A. "Age at Onset of Alcohol Use and Its Association with DSM-IV Alcohol Abuse and Dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey." *Journal of Substance Abuse* 9:103-110, which reports decreasing odds of alcohol dependence with each increasing year of age at onset of use, as well as decreasing odds of alcohol abuse.

⁵⁶Measuring the Health Behavior of Adolescents: The Youth Risk Behavior Surveillance System and Recent Reports on High Risk Adolescents. *Public Health Reports* 108 (Supp. 1). Rockville, Md.: Public Health Service, 1993.

⁵⁷Estimates for whites and blacks exclude Hispanics of those races.

Figure SD 3.7

Percentage of youth ages 12 through 17 in the United States reporting illicit drug^a use and/or binge drinking^b in the past month, by gender: 1996



^aIllicit drugs include marijuana, cocaine (including crack), heroin, hallucinogens (including PCP), inhalants, and nonmedical use of psychotherapeutics.

^bBinge drinking includes drinking five or more drinks on the same occasion on one or more days in the past 30 days.

Sources: Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies, Prevalence Branch. Unpublished analyses, National Household Survey on Drug Abuse.

SD 4.1

SEXUALLY EXPERIENCED TEENS

Sexual experience, and, particularly, age at first intercourse, represent critical indicators of the risk of pregnancy and sexually transmitted diseases. Youth who begin having sex at a younger age are exposed to these risks over a longer period of time. Because sexual intercourse during the teen years, especially first intercourse, is often unplanned,⁵⁸ it is also often unprotected by contraception.⁵⁹ In addition, research has shown that youth who have an early sexual experience are more likely at later ages to have more sexual partners and more frequent intercourse.⁶⁰

Trends over the past several decades show that increasing proportions of teens are sexually experienced--defined as ever having had sexual intercourse (see Table SD 4.1.A).

Differences by Age. Age is the most important correlate of teen sexual experience. For a teen cohort who turned 20 in 1985 through 1987, just under 1 in 10 13-year-old males and only 1 in 50 13-year-old females were sexually experienced by age 13. By age 20 for that same age cohort, about 3 in 4 females and 4 in 5 males were sexually experienced (see Figure SD 4.1). By the late teen years, most teens are sexually experienced; however, it is important to note that not all teens are sexually experienced. Among the 1985-1987 cohort of youth, nearly half of the adolescent females and more than one-third of the adolescent males had not had intercourse by age 18 (see Table SD 4.1.A). The pattern of more teenagers having had sex as age increases is reflected in the data for 1995 as well. Data from the Youth Risk Behavior Surveillance Survey, a survey of students rather than all adolescents, show that, in the 9th grade, 37 percent of students report having had sexual intercourse. This percentage rises with each grade and reaches 66 percent by the 12th grade⁶¹ (see Table SD 4.1.B).

Differences by Gender. Until very recently, more teen males than females reported having had intercourse by a given age. Data from the 1985-1987 cohort suggest that the proportion of teen males at each year of age who report having sex was roughly equal to the rate of sexually experienced teen females who are one year older (see Table SD 4.1.A).

Among female adolescents of all ages, the percentage who were sexually experienced has increased over time (see Table SD 4.1.A). For example, the percentage of 18-year-old females who were sexually experienced increased from 27 percent for the 1958-1960 cohort, to 35 percent for the 1970-1972 cohort, and to 52 percent for the 1985-1987 cohort. Cohorts are defined as those females who turned 20 in the specific time period presented. The percentage of male teens who were sexually experienced has also increased for male adolescents over age 14; for example, the percentage of 18-year-old males who were sexually experienced increased from 55 percent for the 1970-1972 cohort, to 64 percent for the 1985-1987 cohort (see Table SD 4.1.A).

Caution should be exercised in interpreting these differences, however, since the data for males and females come from different surveys. Data for students from the Youth Risk Behavior Surveillance Survey indicate that in 1995, gender differences were minimal or nonexistent (see Table SD 4.1.B). Additional survey research indicates that the percentage of teen males who have ever had sex has declined since 1988, while the use of contraception among teen males increased (1995 National Survey of

⁵⁸Lowenstein, G., and Furstenberg, F.F. 1991. "Is Teenage Sexual Behavior Rational?" *Journal of Applied Social Psychology* 21(12):957-986. For discussions of how wanted and voluntary first sexual encounters were for 1998, forthcoming. "Young Women's Degree of Control over First Intercourse: An Exploratory Analysis." *Family Planning Perspectives*.

⁵⁹Forrest, J.D., and Singh, S. 1990. "The Sexual and Reproductive Behavior of American Women, 1982-1988." *Family Planning Perspectives* 22(5):206-214.

⁶⁰Koyle, P., Jensen, L., Olsen, J., and Cundick, B. 1989. "Comparison of Sexual Behaviors among Adolescents Having an Early, Middle, and Late First Intercourse Experience." *Youth and Society* 20(4):461-475.

⁶¹Direct comparison with other years is not possible, as grade in school does not accurately reflect age and data from the Youth Risk Behavior Surveillance Survey include only teens in school.

⁶²The Urban Institute. "New Data on Sexual Behaviors of Teenage Males." Fact Sheet, May 1, 1997. Washington, DC: The Urban Institute.

Adolescent Males).⁶² The 1995 National Survey of Family Growth found that 50 percent of women 15 through 19 years of age had ever had intercourse, the first decline ever recorded by the periodic survey.⁶³

Differences by Race.⁶⁴ Black students are more likely than white and Hispanic students to have had their first sexual experience while still in high school (see Table SD 4.1.B). Specifically, in 1995,

- 49 percent of both male and female white students reported having had sexual intercourse,
- 62 percent of Hispanic male students and 53 percent of Hispanic female students reported having had sexual intercourse, and
- 81 percent of black male students and 67 percent of black female students reported having had sexual intercourse.

Table SD 4.1.A

Percentage of youth in the United States who have had intercourse by each age, by gender: cohorts^a age 20 in 1958-1960, 1970-1972, and 1985-1987

Age at first intercourse	Females who turned age 20 in: ^b		
	1958-1960	1970-1972	1985-1987
13	1	0	2
14	2	1	5
15	3	4	10
16	8	9	21
17	16	20	36
18	27	35	52
19	46	53	66
20	61	68	76

Age at first intercourse	Males who turned age 20 in: ^b		
	1958-1960	1970-1972	1985-1987
13	—	11	9
14	—	15	13
15	—	20	27
16	—	30	41
17	—	41	52
18	—	55	64
19	—	67	75
20	—	74	80

^aCohorts are defined as those individuals who turned 20 years old within the specified time period.

^bData are based on females ages 30-32 and 42-44 in the 1982 National Survey of Family Growth (NSFG) and ages 21-23 and 36-38 in the 1988 NSFG, and males ages 21-23 and 36-38 in the 1991 Survey of Men.

Source: Alan Guttmacher Institute. 1994. *Sex and America's Teenagers*. New York: Alan Guttmacher Institute. Figures 11 and 12, pages 22-23.

⁶²U.S. Department of Health and Human Services, *HHS News*. "Teen Sex Down, New Study Shows." Secretary Shalala Announces New Teen Pregnancy Prevention Grant Programs." Press release, May 1, 1997. Washington, D.C.: HHS, National Center for Health Statistics.

⁶³Estimates for whites and blacks exclude Hispanics of those races.

Table SD 4.1.B

Percentage of students grades 9 through 12 in the United States who reported ever having sexual intercourse, by gender, grade, and race and Hispanic origin: 1995

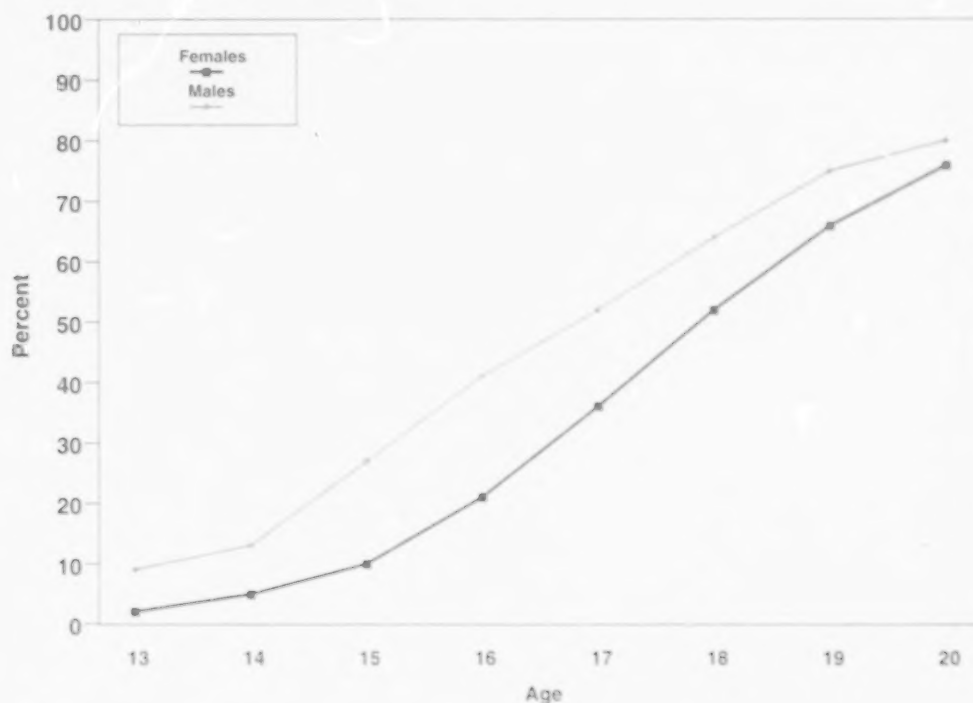
	Total	Male	Female
Total	53	54	52
Grade			
9	37	41	32
10	48	50	46
11	59	57	60
12	66	67	66
Race and Hispanic Origin*			
White, non-Hispanic	49	49	49
Black, non-Hispanic	73	81	67
Hispanic	58	62	53

*Estimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.L., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 26.

Figure SD 4.1

Percentage of youth in the United States who have had intercourse, by age and gender: cohorts^a age 20 in 1985-1987



^aCohorts are defined as those individuals who turned 20 years old within the specified time period.

Source: Alan Guttmacher Institute. 1994. *Sex and America's Teenagers*. New York: Alan Guttmacher Institute, Figures 11 and 12, pages 22-23.

SD 4.2

SEXUALLY ACTIVE TEENS

Having become sexually experienced does not necessarily mean a teenager will be sexually active from that point on. They may still abstain from intercourse out of concern for the risk of pregnancy or sexually transmitted diseases or a preference for abstinence, or they may experience periods in which they do not have a sexual partner; nevertheless, research indicates that once a person has had sex, he or she is likely to continue to be sexually active. Among young adults ages 18 through 22 who had ever had intercourse, over 70 percent had a second experience of intercourse within six months of first intercourse.⁶⁵

The percentage of teens in grades 9 through 12 who are sexually active--defined as having had sexual intercourse in the previous three months--has remained steady at 38 percent from 1991 to 1995 (see Table SD 4.2).

Differences by Gender. There is little difference between the percentages of male and female students who are sexually active. In 1995, 40 percent of males and 36 percent of females reported being sexually active.

Differences by Race and Hispanic Origin.⁶⁶ In 1995, black students were, at 54 percent, more likely than either non-Hispanic white (35 percent) or Hispanic (39 percent) students to be sexually active (see Figure SD 4.2).

Differences by Grade. The percentage of teens who are sexually active rises as grade increases. Twelfth-grade students are nearly twice as likely to be sexually active than are 9th-grade students (see Table SD 4.2).

⁶⁵Moore, K.A., and Peterson, J.L. August 1989. *The Consequences of Teenage Pregnancy: Final Report to NICHD and ASPE*. HHS, Grant No. HD 21537.

⁶⁶Estimates for whites and blacks exclude Hispanics of those races.

Table SD 4.2

Percentage of students grades 9 through 12 in the United States who reported having had sexual intercourse in the previous three months, by gender, race and Hispanic origin, grade, and age: 1991, 1993, and 1995

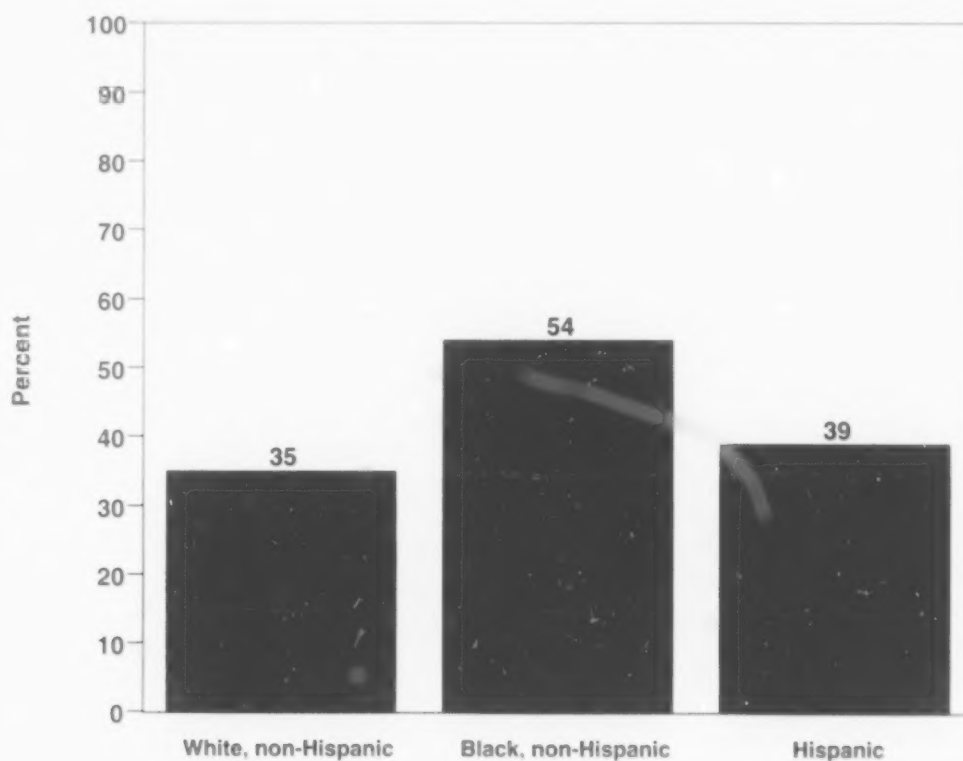
	1991	1993	1995
Total	38	38	38
Gender			
Male	37	38	40
Female	38	38	36
Race and Hispanic origin^a			
White, non-Hispanic	34	34	35
Black, non-Hispanic	59	59	54
Hispanic	37	39	39
Grade			
9	22	25	24
10	33	30	34
11	43	40	42
12	51	53	50
Age			
15 years	24	25	28
16 years	38	35	37
15 or 16 years	31	31	32

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1991: Centers for Disease Control and Prevention. "1990-1991 Youth Risk Behavior Surveillance System." In *Chronic Disease and Health Promotion Reporting from the MMWR*, Table 1, p. 78; Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 20; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 26.

Figure SD 4.2

Percentage of youth in grades 9 through 12 in the United States who reported having had sexual intercourse in the previous three months, by race and Hispanic origin:^a 1995



^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1991: Centers for Disease Control and Prevention. "1990-1991 Youth Risk Behavior Surveillance System." In *Chronic Disease and Health Promotion Reporting from the MMWR*, Table 1, p. 78; Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 20; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 26.

SD 4.3

CONTRACEPTIVE USE BY TEENS

Sexual intercourse without contraception puts a teen at risk of unintended pregnancy and of contracting sexually transmitted diseases such as HIV/AIDS. The vast majority of teens do not want to become pregnant.⁶⁷ Data from a national survey show that among teens who had first intercourse at age 17 or younger, fewer than 1 in 100 wanted a pregnancy to occur at that time. This was true for both males and females, and for both blacks and whites.⁶⁸

Condoms and birth control pills are the most common forms of contraception used by sexually active teenagers.⁶⁹ In 1995, over half (54 percent) of sexually experienced students in grades 9 through 12 reported use of a condom during their last sexual intercourse, while only 17 percent reported use of the birth control pill (see Tables SD 4.3.A and SD 4.3.B).

Condom use among sexually experienced students increased between 1991 to 1995 from 46 percent to 54 percent (see Table SD 4.3.A). Use of birth control pills has remained relatively steady from 1993 to 1995, with some subgroup differences that are discussed below (see Table SD 4.3.B).

Differences by Gender. Female students are less likely than male students to report having used a condom during their last intercourse (49 percent of females versus 61 percent of males in 1995).

Differences by Grade. Use of condoms decreases as grade in school increases, while use of the pill increases with grade. In 1995, 63 percent of sexually experienced students in the 9th grade reported use of a condom, compared with 50 percent of 12th-grade students. In contrast, in 1995, only 11 percent of sexually experienced 9th graders reported use of the pill, while a quarter of 12th graders reported its use (see Figure SD 4.3).

Differences by Race.⁷⁰ Black students report the highest use of condoms, while white students report the highest use of the pill. In 1995, white students were more likely to have used the pill during their last sexual intercourse (21 percent) than were either black students (10 percent) or Hispanic students (11 percent) (see Table SD 4.3.A and SD 4.3.B).

It is important to note that the data presented here include only those teens who are in school. Teens out of school are likely to have lower rates of contraceptive use as their access to education regarding the risks associated with unprotected sex, as well as guidance on how to obtain protection, is more limited.

⁶⁷In the 1995 National Survey of Family Growth, the percentage of births unwanted at the time of conception to women ages 15 through 44 that occurred five years prior to the survey interview were as follows: 9 percent to all mothers, 11 percent to mothers under 20, 8 percent to mothers ages 20 through 24, 9 percent to mothers ages 25 through 29, and 10 percent to mothers ages 30 through 44. Abma, J.C., Chandra, A., Mosher, W.D., Peterson, L., and Piccinino, L. 1997. "Fertility, Family Planning, and Women's Health: New Data from the 1995 National Survey of Family Growth." National Center for Health Statistics, *Vital Health Stat* 23(19).

⁶⁸Moore, K.A., and Peterson, J.L. August 1989. "The Consequences of Teenage Pregnancy." Final Report to NICHD and ASPE/DHHS, Grant No. HD 21537. See also preliminary results of research from the 1995 National Survey of Adolescent Males and the 1995 National Survey of Family Growth, The Urban Institute Fact Sheet (May 1, 1997), "New Data on Sexual Behaviors of Teenage Males."

⁶⁹Peterson, L.S. "Contraceptive Use in the United States: 1982-90." Advance Data, No. 260, February 14, 1995. Division of Vital Statistics, National Center for Health Statistics, Centers for Disease Control and Prevention. Data from the National Survey of Family Growth.

⁷⁰Estimates for whites and blacks exclude Hispanics of those races.

Table SD 4.3.A

Percentage of currently sexually active high school students in the United States who reported using a condom during last sexual intercourse, by gender, grade, and race and Hispanic origin: 1991, 1993, and 1995

	1991			1993			1995		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	46	55	38	53	59	46	54	61	49
Grade									
9	53	56	50	62	63	59	63	66	59
10	46	57	36	55	63	46	60	68	52
11	49	57	41	55	65	46	52	57	49
12	41	51	33	47	52	41	50	57	43
Race and Hispanic origin*									
White, non-Hispanic	47	55	38	52	59	46	53	58	48
Black, non-Hispanic	48	57	39	57	64	48	66	72	61
Hispanic	37	47	27	46	55	37	44	56	33

*Estimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1990: Centers for Disease Control and Prevention. "1990-1991 Youth Risk Behavior Surveillance System." In *Chronic Disease and Health Promotion Reporting from the MMWR*, Table 2, p. 47; Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 20; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 28. Also, unpublished tabulations from L. Kann, Centers for Disease Control and Prevention.

Table SD 4.3.B

Percentage of currently sexually active high school students in the United States who reported birth control pill use during last sexual intercourse, by gender, grade, and race and Hispanic origin: 1993 and 1995

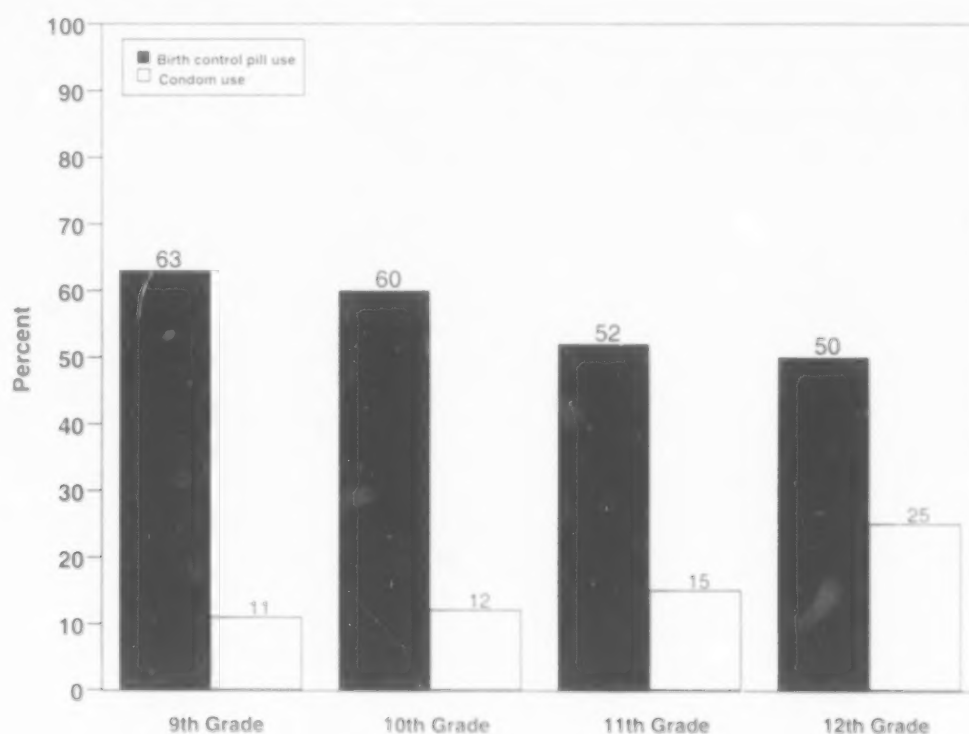
	1993			1995		
	Total	Male	Female	Total	Male	Female
Total	18	15	22	17	14	20
Grade						
9	9	8	11	11	10	13
10	14	10	17	12	9	16
11	17	12	22	15	13	17
12	26	23	29	25	21	29
Race and Hispanic origin ^a						
White, non-Hispanic	20	17	24	21	17	25
Black, non-Hispanic	15	11	21	10	8	12
Hispanic	12	10	15	11	14	9

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 20; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 28.

Figure SD 4.3

Percentage of currently sexually active high school students in the United States who reported using a contraceptive during their last sexual intercourse, by grade and method: 1995



Sources: Data for 1990: Centers for Disease Control and Prevention. "1990-1991 Youth Risk Behavior Surveillance System." In *Chronic Disease and Health Promotion Reporting from the MMWR*, Table 2, p. 47; Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance—United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 20; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance—United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 28. Also, unpublished tabulations from L. Kann, Centers for Disease Control and Prevention.

SD 4.4

NUMBER OF SEXUAL PARTNERS

The greater the number of sexual partners a person has, the greater the risk of contracting sexually transmitted diseases such as HIV/AIDS. While trend data on the sexual behavior of teens are limited, one study indicates that the proportion of sexually active females living in metropolitan areas who have had six or more sexual partners doubled from 1971 to 1988.⁷¹

Differences by Gender. Male youth generally report a higher number of sexual partners than do female youth. In 1992, 31 percent of sexually active males and 18 percent of sexually active females ages 15 through 19 reported having six or more sexual partners. The number of sexual partners among sexually active females is concentrated at the lower end of the scale, with either one, two, or three partners reported (see Table SD 4.4.A). Among high school students surveyed in 1995, 21 percent of males reported having had four or more sexual partners, compared with 14 percent of female students (see Table SD 4.4.B).

Differences by Race.⁷² Black high school students are more likely to have had four or more sexual partners than their white or Hispanic peers: 36 percent versus 14 and 18 percent, respectively, in 1995 (see Table SD 4.4.B).

Differences by Age at First Intercourse. Age at first intercourse has a strong association with the number of sexual partners a person has over a lifetime (see Table SD 4.4.C). Among teens who were age 20 in 1992, 74 percent of males who had sexual intercourse at age 14 or younger had six or more partners during their lifetime, compared with 48 percent of those who initiated sex at age 15 or 16, and 10 percent of those who did not have intercourse until age 17 or older. A similar pattern exists for females (see Figure SD 4.4).

⁷¹Kost, K., and Forrest, J.D. 1992. "American Women's Sexual Behavior and Exposure to Risk of Sexually Transmitted Disease." *Family Planning Perspectives* 24(6):244-254. Based on data from the National Surveys of Young Women (1971, 1976, and 1979) and the 1988 National Survey of Family Growth.

⁷²Estimates for whites and blacks exclude Hispanics of those races.

Table SD 4.4.A

Percentage distribution of number of lifetime sexual partners among sexually active teens ages 15 through 19 in the United States, by gender, race and Hispanic origin, and poverty status: 1992

	1 Partner	2-3 Partners	4-5 Partners	6 or More Partners
Males				
Total	27	28	15	31
Race and Hispanic origin*				
White, non-Hispanic	31	29	15	26
Black, non-Hispanic	12	26	17	45
Hispanic	24	31	12	33
Poverty status				
Below poverty	22	23	15	40
At or above poverty	28	30	15	27
Females				
Total	36	32	15	18
Race and Hispanic origin*				
White, non-Hispanic	36	30	16	18
Black, non-Hispanic	31	37	14	19
Hispanic	43	34	13	10
Poverty status				
Below poverty	34	33	15	18
At or above poverty	37	30	15	18

Note: Percents may not sum to 100 due to rounding.

*Estimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Source: National Center for Health Statistics, Centers for Disease Control and Prevention. 1992 *National Health Interview Survey - Youth Risk Behavior Supplement*. Tabulations by Child Trends, Inc.

Table SD 4.4.B

Percentage of students in grades 9 through 12 in the United States who reported having four or more sex partners during lifetime, by gender, grade, and race and Hispanic origin: 1993 and 1995

	1993			1995		
	Total	Male	Female	Total	Male	Female
Total	19	22	15	18	21	14
Grade						
9	11	15	6	13	18	7
10	16	19	13	16	20	11
11	20	23	16	19	21	17
12	27	31	23	23	25	21
Race and Hispanic origin*						
White, non-Hispanic	14	15	13	14	15	13
Black, non-Hispanic	43	59	27	36	52	22
Hispanic	19	26	11	18	24	12

*Estimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Data for 1993: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance--United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 20; Data for 1995: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance--United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 26.

Table SD 4.4.C

Percentage distribution of number of lifetime sexual partners among sexually active 20-year-olds, by age at first intercourse, and by gender: 1992

	First Intercourse at Age 14 or Younger	First Intercourse at Age 15 or 16	First Intercourse at Age 17 or Older
Males			
1 partner	2	9	42
2 or 3 partners	10	27	30
4 or 5 partners	15	16	19
6 or more partners	74	48	10
Females			
1 partner	2	10	45
2 or 3 partners	26	28	33
4 or 5 partners	16	28	13
6 or more partners	57	34	10

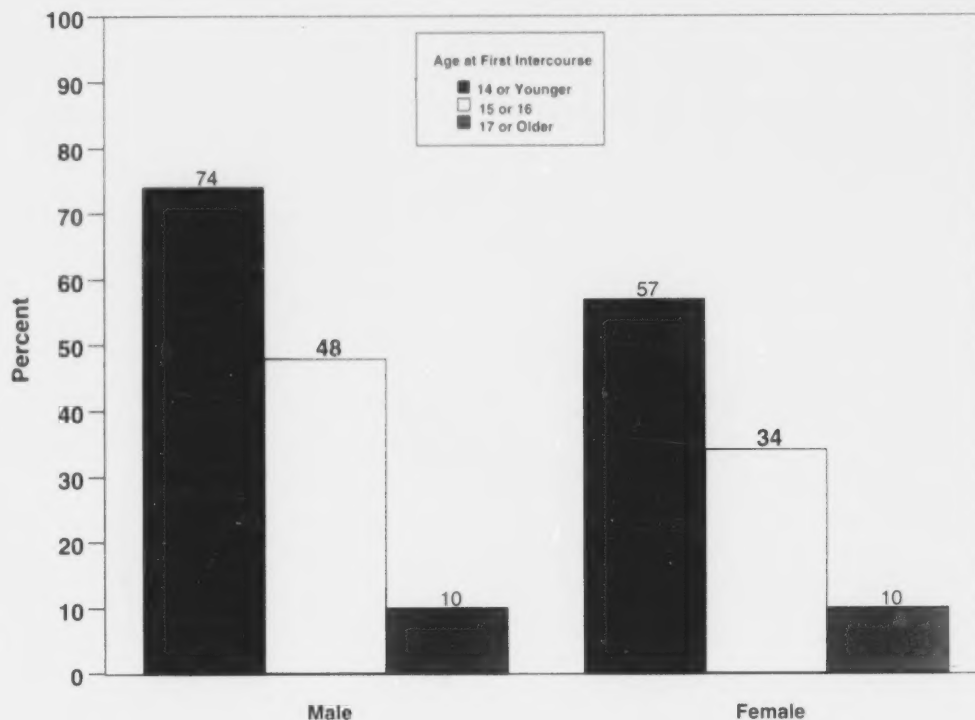
Note: Percents may not sum to 100 due to rounding.

Source: National Center for Health Statistics, Centers for Disease Control and Prevention. 1992 *National Health Interview Survey - Youth Risk Behavior Supplement*. Tabulations by Child Trends, Inc.

Figure SD 4.4

Percentage of sexually active 20-year-olds in the United States with six or more lifetime sexual partners, by age at first intercourse: 1992

Source: National Center for Health Statistics, Centers for Disease Control and Prevention. 1992 National Health Interview



Survey - Youth Risk Behavior Supplement. Tabulations by Child Trends, Inc.

SD 4.5

TEEN PREGNANCY

The overwhelming majority of teens in the United States do not want to become parents as teens.⁷³ Among all pregnancies to teens ages 15 through 19 at pregnancy outcome, 78 percent were unintended at conception.⁷⁴

From 1973 to 1990, the percentage of females ages 15 through 19 who became pregnant generally increased, rising from 9.6 percent in 1973 to 11.5 percent in 1990. This percentage had declined slightly to 11.1 percent by 1992 (see Table SD 4.5.A). In addition, among females ages 15 through 19, state data (not shown) indicate that from 1991 through 1992, pregnancy rates decreased significantly in 30 of the 41 reporting states and the District of Columbia.⁷⁵

Differences by Age. Pregnancy is more prevalent among older teens. In 1992, 7.3 percent of females ages 15 through 17 became pregnant, compared with 16.8 percent among those ages 18 or 19 (see Table SD 4.5.B).

Differences by Race and Hispanic Origin.⁷⁶ Non-Hispanic white females ages 15 through 19 are less likely to become pregnant than are non-Hispanic black and Hispanic females. Among females ages 15 through 17, Hispanics are more than two times as likely and non-Hispanic blacks are more than three times as likely to become pregnant than are non-Hispanic whites. Non-Hispanic black and Hispanic teens ages 18 or 19 are at least twice as likely to become pregnant as their non-Hispanic white peers (see Table SD 4.5.B).

Sexually Experienced Teens. When the percentage of teens becoming pregnant is examined within the context only of those sexually experienced females ages 15 through 19, rather than all female teens ages 15 through 19, the percentage becoming pregnant has declined slightly, but steadily, from 25.4 percent in 1973 to 20.9 percent in 1991 (see Figure SD 4.5).

⁷³Henshaw, S.K. 1998. "Unintended Pregnancy in the United States." *Family Planning Perspectives* 30(1):24-29,46; Alan Guttmacher Institute, 1994. *Sex and America's Teenagers*. New York: Alan Guttmacher Institute.

⁷⁴Based on analysis of the 1995 National Survey of Family Growth (NSFG), cycle 5, by Child Trends, Inc. When examining births to teens, the 1995 NSFG showed that 73.5 percent of births were either unwanted or unintended at conception.

⁷⁵"State-specific Pregnancy and Birth Rates among Teenagers: United States, 1991-1992." *Morbidity and Mortality Weekly Report*, Sept. 22, 1995.

⁷⁶Estimates for whites and blacks exclude Hispanics of those races.

Table SD 4.5.A

Percentage of females under age 20 in the United States experiencing pregnancy,^a by age and by all females and sexually experienced females: selected years, 1973-1992

	1973	1975	1980	1985	1990	1991	1992
All females age 14 or younger ^b	1.4	1.5	1.6	1.6	1.7	1.7	1.7
All females ages 15-17	6.7	6.9	7.3	7.1	7.6	7.5	7.3
All females age 18 or 19	14.1	14.9	16.2	15.8	16.6	17.1	16.8
All females ages 15-19	9.6	10.1	11.0	10.7	11.5	11.5	11.1
Sexually experienced females ages 15-19 ^c	25.4	24.3	23.5	21.4	20.9	20.9	n/a

^aPregnancies are calculated by summing the number of live births, the number of abortions, and the estimated number of spontaneous fetal losses. Spontaneous fetal losses are based on data from the National Survey of Family Growth conducted by the National Center for Health Statistics.

^bDenominator is 14-year-old females.

^cData for sexually experienced females are not available for 1992.

Sources: All data for 1973, and sexually experienced female data for 1976, are from Henshaw, S.K. 1994. *U.S. Teenage Pregnancy Statistics*. New York: Alan Guttmacher Institute, and *Sex and America's Teenagers*, New York: Alan Guttmacher Institute. 1994; All other data from Ventura, S.J., Taffel, S.M., Mosher, W.D., Wilson, J.B., and Henshaw, S.K. "Trends in Pregnancies and Pregnancy Rates: Estimates for the United States, 1980-92." *Monthly Vital Statistics Report* 43 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1995; Also, unpublished data from Ventura, Mosher, and Henshaw, National Center for Health Statistics.

Table SD 4.5.B

Percentage of females ages 15 through 19 experiencing pregnancy^a by age and by race and Hispanic origin: 1990-1992

	1990	1991	1992
Females ages 15-17			
Total	7.6	7.5	7.3
Race and Hispanic origin^b			
White, non-Hispanic	5.4	5.1	4.8
Black, non-Hispanic	15.8	15.8	15.4
Hispanic	11.7	12.4	12.8
Females age 18 or 19			
Total	16.6	17.1	16.8
Race and Hispanic origin^b			
White, non-Hispanic	13.0	13.1	12.6
Black, non-Hispanic	29.3	29.8	29.9
Hispanic	24.4	26.1	26.5
Females ages 15-19			
Total	11.5	11.5	11.1
Race and Hispanic origin^b			
White, non-Hispanic	8.8	8.5	7.9
Black, non-Hispanic	21.7	21.7	21.2
Hispanic	17.0	18.0	18.4

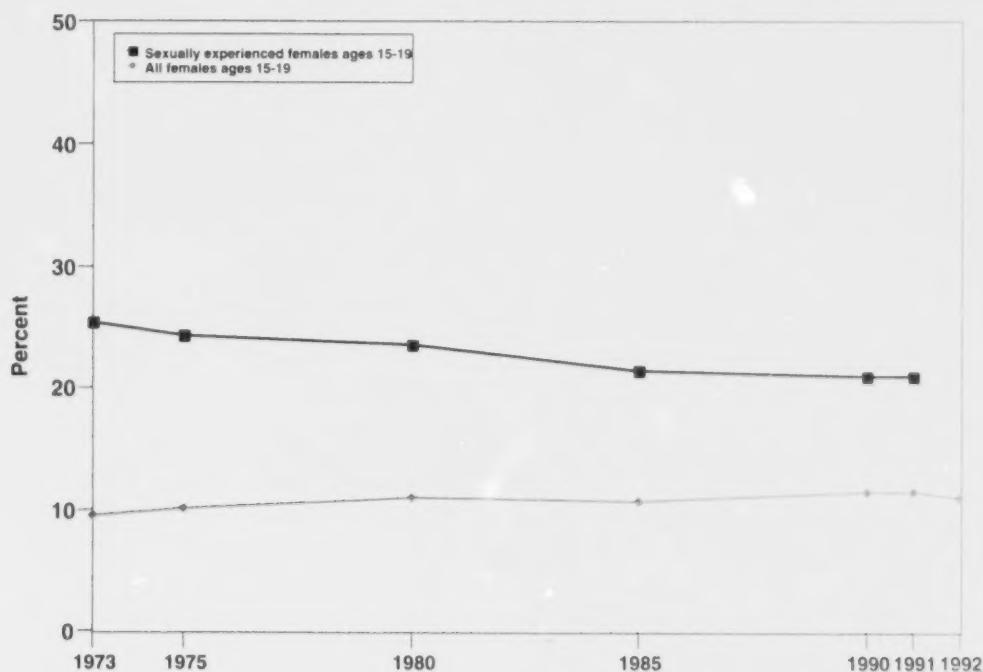
^aPregnancies are calculated by summing the number of live births, the number of abortions, and the estimated number of spontaneous fetal losses. Spontaneous fetal losses are based on data from the National Survey of Family Growth conducted by the National Center for Health Statistics.

^bEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Ventura, S.J., Taffel, S.M., Mosher, W.D., Wilson, J.B., and Henshaw, S.K. "Trends in Pregnancies and Pregnancy Rates: Estimates for the United States, 1980-92." *Monthly Vital Statistics Report* 43 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1995; Also, unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

Figure SD 4.5

Percentage of females ages 15 through 19 in the United States experiencing pregnancy^a by all females ages 15 through 19 and by sexually experienced females ages 15 through 19: selected years, 1973-1992



^aPregnancies are calculated by summing the number of live births, the number of abortions, and the estimated number of spontaneous fetal losses. Spontaneous fetal losses are based on data from the National Survey of Family Growth conducted by the National Center for Health Statistics.

Sources: All data for 1973, and sexually experienced female data for 1976, are from Henshaw, S.K. 1994. *U.S. Teenage Pregnancy Statistics*. New York: Alan Guttmacher Institute, and *Sex and America's Teenagers*, New York: Alan Guttmacher Institute. 1994; All other data from Ventura, S.J., Tafel, S.M., Mosher, W.D., Wilson, J.B., and Henshaw, S.K. "Trends in Pregnancies and Pregnancy Rates: Estimates for the United States, 1980-92." *Monthly Vital Statistics Report* 43 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1995; Also, unpublished data from Ventura, Mosher, and Henshaw, National Center for Health Statistics.

SD 4.6

ABORTION AMONG TEENS

The proportion of females ages 15 through 19 who obtained an abortion during the previous year increased from 2.3 to 4.4 percent between 1973 and 1985, presumably influenced both by the legalization of abortion and increasing levels of sexual activity and pregnancy (see Table SD 4.6.A). By 1992, the proportion obtaining abortions had dropped to 3.6 percent. Similar patterns occurred among both younger teens (ages 15 through 17) and older teens (age 18 or 19).

There has not been a steady trend in the propensity of pregnant teens to give birth versus obtain an abortion over the past 20 years (see Figure SD 4.6). In 1972, the proportion of pregnancies (excluding miscarriages) to females ages 15 through 19 that ended in birth was 76 percent. During the rest of the 1970s this proportion declined as abortion increased. Throughout most of the 1980s, however, the proportion of teen pregnancies ending in birth remained fairly stable at around 55 percent. By 1992, there was an increase to 63 percent in the proportion of teen pregnancies ending in birth, indicating a trend toward fewer abortions among pregnant teens.

Differences by Age. Older teens age 18 or 19 are more likely to have had an abortion than are younger teens ages 15 through 17. In 1992, 2.3 percent of younger teens and 5.4 percent of older teens obtained an abortion (see Table SD 4.6.A).

Differences by Race and Hispanic Origin.⁷⁷ Non-Hispanic black teens are more likely to have had an abortion than are their non-Hispanic white and Hispanic peers. Among non-Hispanic black females ages 15 through 19, 8.0 percent obtained an abortion in 1992, compared with 2.5 percent of non-Hispanic white and 4.3 percent of Hispanic females (see Table SD 4.6.B).

Sexually Experienced Teens. The percent of teens who are sexually experienced has increased during the past several decades and, therefore, it is reasonable to consider abortion in light of this trend. When abortion rates are calculated among females ages 15 through 19 who have ever had intercourse, the data indicate that the proportion obtaining abortions increased from 5.9 percent in 1973 to 9.1 percent in 1980, then declined to 6.8 percent in 1991 (see Table SD 4.6.A). Although a larger proportion of teen females were sexually experienced in 1990 than in 1980, a smaller proportion of these sexually experienced teens obtained abortions.

⁷⁷ Estimates for whites and blacks exclude Hispanics of those races.

Table SD 4.6.A

Percentage of females under age 20 in the United States obtaining an abortion, by all females and sexually experienced females: selected years, 1973-1992

	1973	1975	1980	1985	1990	1991	1992
All females age 14 or younger ^a	0.6	0.7	0.8	0.9	0.8	0.7	0.8
All females ages 15 - 17	1.9	2.4	3.0	3.1	2.7	2.4	2.3
All females age 18 or 19	2.9	4.2	6.1	6.2	5.8	5.6	5.4
All females ages 15 - 19	2.3	3.1	4.3	4.4	4.0	3.8	3.6
Sexually experienced females ages 15-19 ^b	5.9	7.5	9.1	8.5	7.3	6.8	n/a

^aDenominator is 14-year-old females.

^bData for sexually experienced females for 1985 were interpolated from 1980 and 1988 data. Data for sexually experienced females are not available for 1992.

Sources: All data for 1973, and sexually experienced female data for 1976, are from: Henshaw, S.K. 1994. *U.S. Teenage Pregnancy Statistics*. New York: Alan Guttmacher Institute; and *Sex and America's Teenagers*. 1994. New York: Alan Guttmacher Institute. 1994. Both are based on data from abortion providers and sexual experience data from the National Survey of Family Growth; All other data from Ventura, S.J., Taffel S.M., Mosher, W.D., Wilson, J.B., and Henshaw, S.K.

"Trends in Pregnancies and Pregnancy Rates: Estimates for the United States, 1980-92." *Monthly Vital Statistics Report* 43 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1995; Also, unpublished data from Ventura, Mosher, and Henshaw, National Center for Health Statistics.

Table SD 4.6.B

Percentage of females ages 15 through 19 in the United States obtaining an abortion during the year, by age and by race and Hispanic origin: 1990-1992

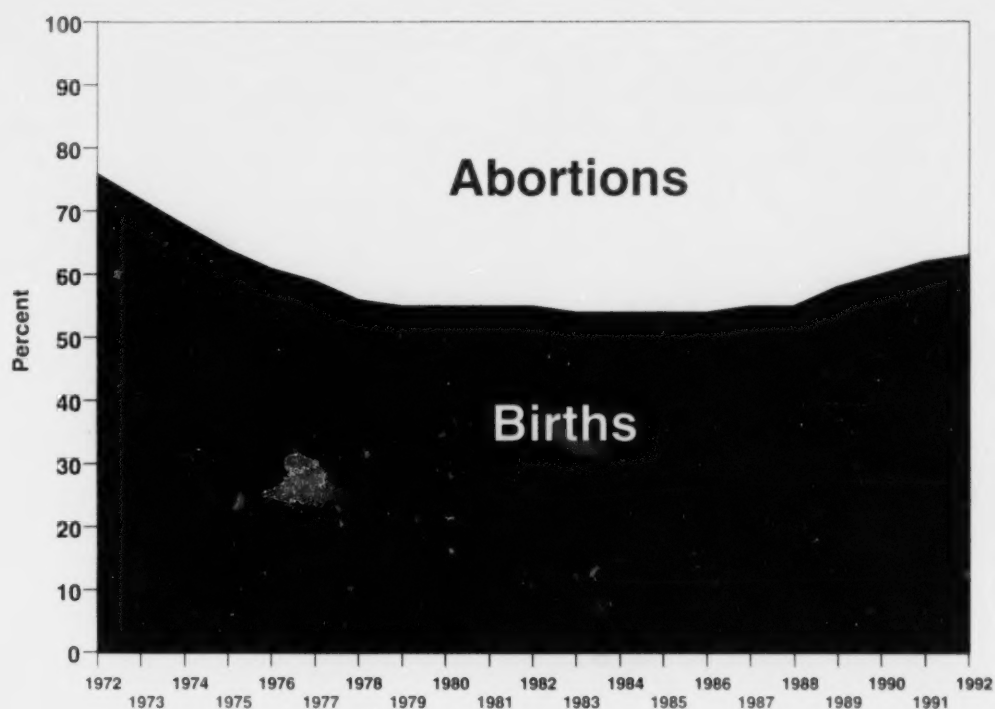
	1990	1991	1992
Females ages 15-17			
Total	2.7	2.4	2.3
Race and Hispanic origin*			
White, non-Hispanic	2.1	1.8	1.6
Black, non-Hispanic	5.8	5.5	5.4
Hispanic	2.4	2.5	2.8
Females age 18 or 19			
Total	5.8	5.6	5.4
Race and Hispanic origin*			
White, non-Hispanic	4.7	4.3	3.9
Black, non-Hispanic	11.7	11.6	11.7
Hispanic	6.0	6.3	6.6
Females ages 15-19			
Total	4.0	3.8	3.6
Race and Hispanic origin*			
White, non-Hispanic	3.2	2.8	2.5
Black, non-Hispanic	8.4	8.1	8.0
Hispanic	3.9	4.0	4.3

*Estimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Ventura, S.J., Taffel, S.M., Mosher, W.D., Wilson, J.B., and Henshaw, S.K. "Trends in Pregnancies and Pregnancy Rates: Estimates for the United States, 1980-92." *Monthly Vital Statistics Report* 43 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1995; Also, unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

Figure SD 4.6

Percentage of pregnancies among females ages 15 through 19 in the United States ending in birth and ending in abortion: 1972-1992



Note: Pregnancies do not include miscarriages.

Sources: Alan Guttmacher Institute. 1994. *Sex and America's Teenagers*, Figure 33. New York: Alan Guttmacher Institute. Based on data from abortion providers and sexual experience data from the National Survey of Family Growth. All other data from Ventura, S.J., Taffel S.M., Mosher, W.D., Wilson, J.B., and Henshaw, S.K. "Trends in Pregnancies and Pregnancy Rates: Estimates for the United States, 1980-92." *Monthly Vital Statistics Report* 43 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1995. Also, unpublished data from S. Ventura, National Center for Health Statistics.

SD 4.7

TEEN BIRTHS

Research indicates that giving birth as a teen can have negative consequences on both mothers and their children over and above the effects of her disadvantaged background. Giving birth at an early age can limit a young woman's options regarding education and employment opportunities, increases the likelihood that she will need public assistance, and can have negative effects on the development of her children.⁷⁸

Between 1960 and 1985, birth rates for teens ages 15 through 19 dropped steadily from 89.1 to 51 per 1,000 teen women. This trend reversed between 1985 and 1991, and the teen birth rate increased to 62.1 per 1,000 teen women. Since 1991, the teen birth rate has again turned downward, declining to 54.7 births per 1,000 teen women by 1996 (see Figure SD 4.7).⁷⁹

Differences by Race and Hispanic Origin.⁸⁰ The trends described in the previous paragraph are evident for white and black women ages 15 through 19. In contrast, the birth rate for Hispanic teens increased from 82.2 per 1,000 teen women in 1980 (the first year for which data were available) to 106.7 per 1,000 teen women in 1991 and had remained fairly stable through 1995. Preliminary data for 1996 suggest a teen birth rate of 101.6 births per 1,000 Hispanic women ages 15 through 19 (see Table SD 4.7).

The birth rate for black teens has remained nearly twice that of white teens since 1960. In 1996, the birth rate for white teens was 48.4 per 1,000 teen women, and for black teens it was 91.7 per 1,000 teen women. Black teens had the highest birth rate until 1994, when the rate for Hispanic teens surpassed that of blacks and has remained at a higher level through 1996. Black teens experienced a sharp drop in birth rates between 1994 and 1996, from 104.5 to 91.7 per 1,000 women ages 15 through 19 (see Table SD 4.7). From 1991 to 1996, the birth rate for black teens dropped by 21 percent.

Differences by Age. Teen birth rates increase with age. In 1996 preliminary data, the birth rate for all teens ages 15 through 17 was 34.0 per 1,000 teen women and 86.5 per 1,000 teen women age 18 or 19. Rates for teen females ages 10 through 14 are considerably lower at 1.2 per 1,000. For black and Hispanic teens, the birth rate among 18- and 19-year-olds is more than twice that of the 15- through 17-year-old teen females. The birth rate of white teen females age 18 or 19 is almost three times that of younger teens ages 15 through 17.

Fathers of Children Born to Teen Mothers. The most recent data available (from 1988, not shown) indicate that the majority of fathers of children born to teen mothers were not teenagers themselves. For mothers age 17, more than half (55 percent) of the fathers were age 20 or older.⁸¹

⁷⁸Moore, K.A. 1993. *Teenage Childbearing: A Pragmatic Perspective*. Washington, D.C.: Child Trends, Inc.; Maynard, R.A. (ed.). 1996. *Kids Having Kids: A Robin Hood Foundation Special Report on the Costs of Adolescent Childbearing*. New York: The Robin Hood Foundation.

⁷⁹Data for 1996 are preliminary.

⁸⁰Estimates for white and black teens include those of Hispanic origin. Teens of Hispanic origin may be of any race.

⁸¹1988 National Maternal and Infant Health Survey tabulations by the Alan Guttmacher Institute. Calculations by Child Trends, Inc.

Table SD 4.7

Teen birth rates in the United States by age of mother and by race and Hispanic origin (births per 1,000 females in each age group): selected years, 1960-1996^b

	1960 ^a	1965 ^a	1970 ^a	1975 ^a	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^b
All races													
Ages 10-14	—	—	1.2	1.3	1.1	1.2	1.4	1.4	1.4	1.4	1.4	1.3	1.2
Ages 15-17	43.9	36.6	38.8	36.1	32.5	31.0	37.5	38.7	37.8	37.8	37.6	36.0	34.0
Age 18 or 19	166.7	124.5	114.7	85.0	82.1	79.6	88.6	94.4	94.5	92.1	91.5	89.1	86.5
Ages 15-19	89.1	70.5	68.3	55.6	53.0	51.0	59.9	62.1	60.7	59.6	58.9	56.8	54.7
White^c													
Ages 10-14	—	—	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.8
Ages 15-17	35.5	27.8	29.2	28.0	25.5	24.4	29.5	30.7	30.1	30.3	30.7	30.0	28.6
Age 18 or 19	154.6	111.9	101.5	74.0	73.2	70.4	78.0	83.5	83.8	82.1	82.1	81.2	78.8
Ages 15-19	79.4	60.6	57.4	46.4	45.4	43.3	50.8	52.8	51.8	51.1	51.1	50.1	48.4
Black^c													
Ages 10-14	—	—	5.2	5.1	4.3	4.5	4.9	4.8	4.7	4.6	4.6	4.2	3.7
Ages 15-17	—	99.3	101.4	85.6	72.5	69.3	82.3	84.1	81.3	79.8	76.3	69.7	64.9
Age 18 or 19	—	227.6	204.9	152.4	135.1	132.4	152.9	158.6	157.9	151.9	148.3	137.1	133.0
Ages 15-19	156.1	144.6	140.7	111.8	97.8	95.4	112.8	115.5	112.4	108.6	104.5	96.1	91.7
Hispanic^{d,e}													
Ages 10-14	—	—	—	—	1.7	—	2.4	2.4	2.6	2.7	2.7	2.7	2.6
Ages 15-17	—	—	—	—	52.1	—	65.9	70.6	71.4	71.7	74.0	72.9	68.9
Age 18 or 19	—	—	—	—	126.9	—	147.7	158.5	159.7	159.1	158.0	157.9	150.7
Ages 15-19	—	—	—	—	82.2	—	100.3	106.7	107.1	106.8	107.7	106.7	101.6

^aBeginning in 1980, births tabulated by race and ethnicity of the mother. Prior to 1980, births tabulated by race of child, assigning a child to the race of the nonwhite parent, if any, or to the race of the father, if both are nonwhite.

^bData for 1996 are preliminary.

^cIncludes persons of Hispanic origin.

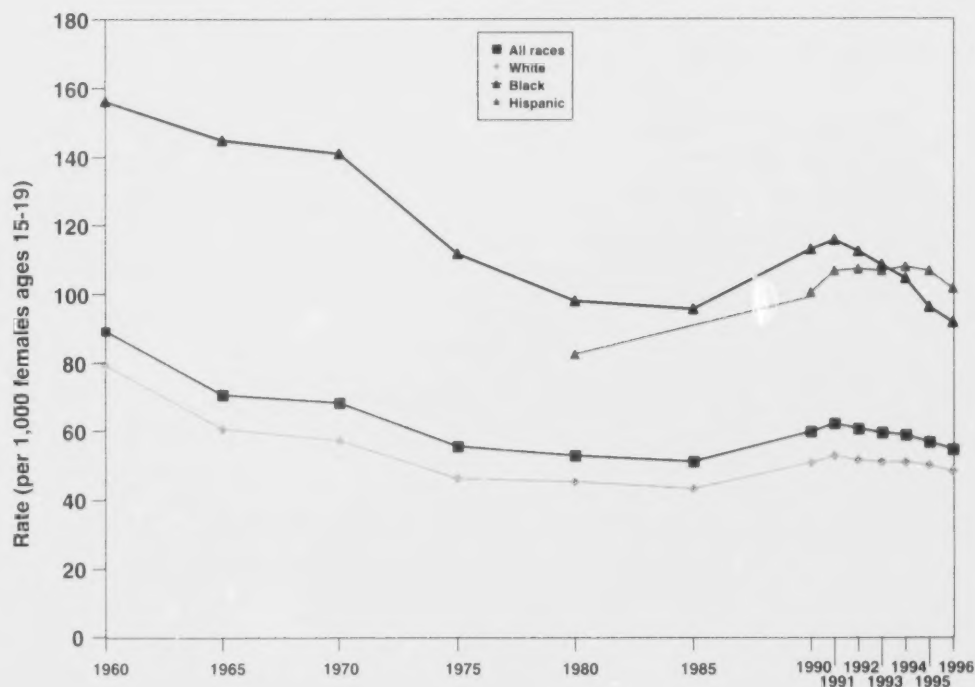
^dPersons of Hispanic origin may be of any race.

^eData for Hispanics have been available only since 1980, with 22 states reporting in 1980, representing 90 percent of the Hispanic population. Hispanic birth data were reported by 23 states and the District of Columbia in 1985; 48 states and District of Columbia in 1990; 49 states and the District of Columbia in 1991 and 1992; and all 50 states and the District of Columbia since 1993. Rates in 1985 were not calculated for Hispanics because estimates for populations were not available.

Sources: National Center for Health Statistics. *Vital Statistics of the United States, 1992, Vol. I, Natality*. Washington, D.C.: Public Health Service, 1995; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report; Ventura, S.J. "Births of Hispanic Parentage, 1980." *Monthly Vital Statistics Report* 32 (6, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1983; 1996 preliminary data from Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997.

Figure SD 4.7

Teen birth rates in the United States, by race^a and Hispanic origin^b (births per 1,000 females ages 15 through 19): selected years, 1960-1996^c



^aBeginning in 1980, births tabulated by race and ethnicity of the mother. Prior to 1980, births tabulated by race of child, assigning a child to the race of the nonwhite parent, if any, or to the race of the father, if both are nonwhite. Data for black and white births include births of Hispanic origin.

^bPersons of Hispanic origin may be of any race. Data for Hispanics have been available only since 1980, with 22 states reporting in 1980, representing 90 percent of the Hispanic population. Hispanic birth data were reported by 23 states and the District of Columbia in 1985; 48 states and District of Columbia in 1990; 49 states and the District of Columbia in 1991 and 1992; and all 50 states and the District of Columbia since 1993. Rates in 1985 were not calculated for Hispanics because estimates for populations were not available.

^cData for 1996 are preliminary.

Sources: National Center for Health Statistics. *Vital Statistics of the United States, 1992, Vol. I, Natality*. Washington, D.C.: Public Health Service, 1995; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report; Ventura, S.J. "Births of Hispanic Parentage, 1980." *Monthly Vital Statistics Report* 32 (6, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1983; 1996 preliminary data from Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997.

SD 4.8

TEEN NONMARITAL BIRTHS

Nonmarital childbearing has consequences for the child, the parent, and society. Raising a child is a challenging task, even for two parents. A large body of research suggests that the absence of a father is associated with negative outcomes for children when they grow up;⁸² for example, studies have linked growing up with a single parent to lower educational attainment for the child.⁸³ In 1996, about 30 percent of nonmarital births were to teenagers.⁸⁴ Bearing children outside of marriage is a particularly troubling development for this age group because these young women often have little education and lack the ability to support their families economically, especially as a single parent.

Nonmarital childbearing has increased among teens of all ages and across all racial and ethnic groups since 1960 (see Figure SD 4.8). Among all young women ages 15 through 19, 15 percent of births were nonmarital in 1960, compared with 76 percent in 1996 (see Table SD 4.8).⁸⁵ The percentage of births to teens that occurred outside of marriage has risen fairly steadily through 1994; however, the rather sharp increase between 1993 and 1994 (from 71 to 75 percent) is largely if not completely the result of improvements in the identification of nonmarital births in two states: Texas and Michigan.⁸⁶ The percentage of teen nonmarital births has been relatively stable across all groups since 1994.

Differences by Race.⁸⁷ Nonmarital childbearing is higher among black teens than among white and Hispanic teens. In 1996, 95 percent of births to black females ages 15 through 19 were nonmarital, compared with 69 percent for whites and 68 percent for Hispanics.

Differences by Age. Younger teens who give birth are more likely to be unmarried when they deliver than are older teens in each year and across race/ethnic groups. In 1996, 85 percent of births to 15-through 17-year-olds were to unmarried mothers, compared with 71 percent among 18- through 19-year-olds.

⁸²McLanahan, S., and Sandefur, G. 1994. "Growing Up with a Single Parent: What Hurts, What Helps." Cambridge, Mass.: Harvard University Press; Haveman, R., and Wolfe, B. 1994. *Succeeding Generations: On the Effects of Investments in Children*. New York: Russell Sage Foundation.

⁸³Knox, V., and Bane, M.J. 1994. "Child Support and Schooling." In *Child Support and Child-Well-Being*. (I. Garfinkel, S. McLanahan, and P. Robins, eds.). Washington, D.C.: The Urban Institute.

⁸⁴Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996," Table C. *Monthly Vital Statistics Report* 46, (1 Supp. 2). Hyattsville, Md.: National Center for Health Statistics, September 11, 1997.

⁸⁵Data for 1996 are preliminary.

⁸⁶Ventura, S.J., Martin, J.A., Mathews, T.J. and Clarke, S.C. "Advance Report of Final Natality Statistics, 1994." *Monthly Vital Statistics Report* 44 (11, Supp.) Hyattsville, Md.: National Center for Health Statistics, 1996.

⁸⁷Estimates for white and black teens include those of Hispanic origin. Teens of Hispanic origin may be of any race.

Table SD 4.8

Percentage of all births to unmarried women ages 15 through 19 in the United States, by age of mother and by race and Hispanic origin: selected years, 1960-1996^b

	1960 ^a	1965 ^a	1970 ^a	1975 ^a	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^b
All races													
Ages 15-17	24	33	43	51	62	71	78	79	79	80	84	84	85
Age 18 or 19	11	15	22	30	40	51	61	63	65	66	70	70	71
Ages 15-19	15	21	30	38	48	58	67	69	70	71	75	75	76
White ^c													
Ages 15-17	12	17	25	33	45	58	68	70	71	72	78	77	79
Age 18 or 19	5	9	14	17	27	38	51	53	55	57	62	62	63
Ages 15-19	7	11	17	23	33	45	56	59	60	62	68	68	69
Black ^c													
Ages 15-17	—	—	76	87	93	96	96	96	96	96	98	98	98
Age 18 or 19	—	—	52	68	80	86	89	90	90	91	93	93	94
Ages 15-19	—	—	63	77	86	90	92	92	93	93	95	95	95
Hispanic ^{d,e}													
Ages 15-17	—	—	—	—	51	61	68	69	69	69	77	75	75
Age 18 or 19	—	—	—	—	36	46	54	56	57	58	65	62	63
Ages 15-19	—	—	—	—	42	51	59	61	62	63	70	67	68

^aBeginning in 1980, births tabulated by race and ethnicity of the mother. Prior to 1980, births tabulated by race of child, assigning a child to the race of the nonwhite parent, if any, or to the race of the father, if both are nonwhite.

^bData for 1996 are preliminary.

^cIncludes persons of Hispanic origin.

^dPersons of Hispanic origin may be of any race.

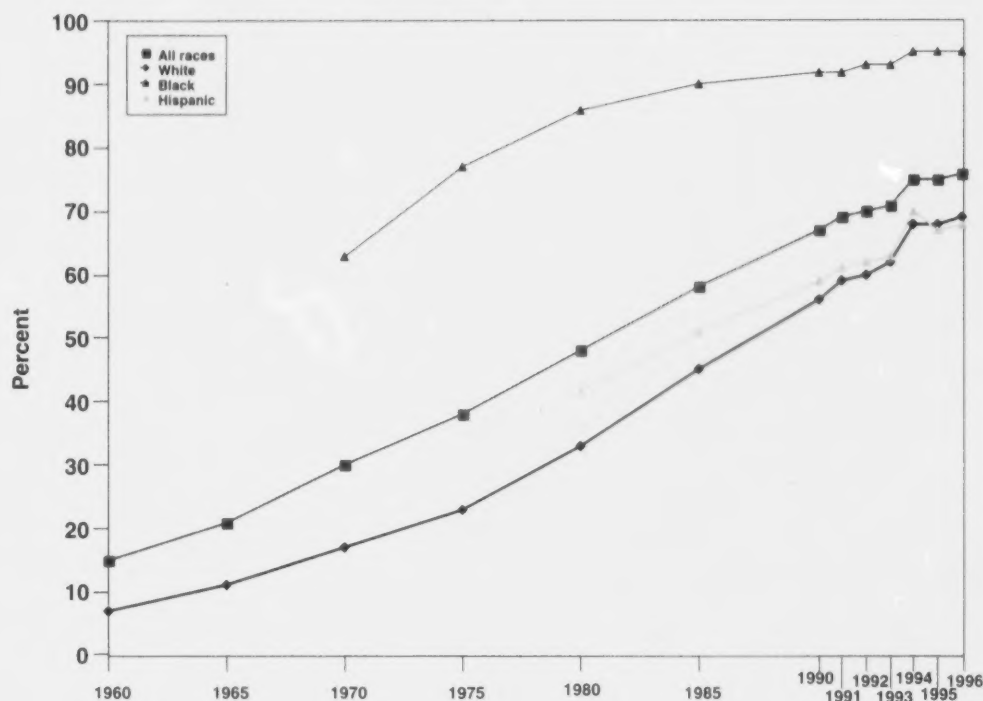
^eData for Hispanics have been available only since 1980, with 22 states reporting in 1980, representing 90 percent of the Hispanic population. Hispanic birth data were reported by 23 states and the District of Columbia in 1985; 48 states and District of Columbia in 1990; 49 states and the District of Columbia in 1991 and 1992; and all 50 states and the District of Columbia since 1993.

Note: Increases between 1993 and 1994 were due primarily to improvements in the identification of nonmarital births in Texas and Michigan.

Sources: Ventura S.J. "Births to Unmarried Mothers: United States, 1980-1992." National Center for Health Statistics, *Vital and Health Statistics*, Series 21, No. 53, 1993; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report; 1996 preliminary data from Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Also unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

Figure SD 4.8

Percentage of all births to unmarried women ages 15 through 19 in the United States, by race^a and Hispanic origin:^b selected years, 1960-1996^c



^aBeginning in 1980, births tabulated by race and ethnicity of the mother. Prior to 1980, births tabulated by race of child, assigning a child to the race of the nonwhite parent, if any, or to the race of the father, if both are nonwhite. Data for black and white births include births of Hispanic origin.

^bPersons of Hispanic origin may be of any race. Data for Hispanics have been available only since 1980, with 22 states reporting in 1980, representing 90 percent of the Hispanic population. Hispanic birth data were reported by 23 states and the District of Columbia in 1985; 48 states and District of Columbia in 1990; 49 states and the District of Columbia in 1991 and 1992; and all 50 states and the District of Columbia since 1993.

^cData for 1996 are preliminary.

Note: Increases between 1993 and 1994 were due primarily to improvements in the identification of nonmarital births in Texas and Michigan.

Sources: Ventura S.J. "Births to Unmarried Mothers: United States, 1980-1992." National Center for Health Statistics, *Vital and Health Statistics*, Series 21, No. 53, 1993; Ventura, S.J., Martin, J.A. Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report; 1996 preliminary data from Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Also unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

SD 4.9

SECOND- AND HIGHER- ORDER BIRTHS TO TEENS

Bearing a child during adolescence is associated with poor outcomes for young women and their children.⁸⁸ Giving birth to a second child while still a teen further increases these risks.⁸⁹ Yet analyses of nationally representative data indicate that in the two years following the first birth, teen mothers have a second birth at about the same rate as older mothers.⁹⁰

In 1996, more than one in every five births to teen mothers was a birth of second order or higher.⁹¹ The proportion of teen births that were second or higher order increased from 22 percent in 1980 to peak at 25 percent in 1991, and has since declined to a preliminary estimate of 21 percent in 1996. This pattern is evident across racial and ethnic groups and regardless of marital status (see Table SD 4.9).

Differences by Race and Hispanic Origin. Births to black and Hispanic teens are more likely to be subsequent births than births to white teens. Preliminary estimates for 1996 indicate 27 percent of births to black teens, 24 percent of births to Hispanic teens, and 19 percent of births to white teens were second or higher order births.

Differences by Marital Status. A higher proportion of births among married teens are second or higher order than births to unmarried teens. In 1995, 26 percent of births to married teens were second or higher order, compared with 19 percent among unmarried teens.

⁸⁸Moore, K.A., Myers, D.E., Morrison, D.R., Nord, C.W., Brown, B.B., and Edmonston, B. 1993. "Age at First Childbirth and Later Poverty." *Journal of Research on Adolescence* 3(4):393-422; Maynard, R.A. (ed.). 1996. *Kids Having Kids: A Robin Hood Foundation Special Report on the Costs of Adolescent Childbearing*. New York: The Robin Hood Foundation.

⁸⁹Kalmuss, D., and Namerow, P.B. 1992. "The Mediators of Educational Attainment among Early Childbearers." Unpublished manuscript. Columbia University, Center for Population and Family Health.

⁹⁰Moore, K.A., Morrison, D.R., Nord, C.W., and Blumenthal, C. 1993. "The Consequences of Early Childbearing in the 1980s." Unpublished tables. Washington, D.C.: Child Trends, Inc.

⁹¹Data for 1996 are preliminary.

Table SD 4.9

Percentage of all births to women under age 20 in the United States that are second or higher order, by marital status and by race and Hispanic origin of mother: selected years, 1980-1996^a

	1980	1985	1991	1994	1995	1996 ^c
All births	22	23	25	22	21	21
Race and Hispanic origin						
White ^b	19	20	21	19	19	19
Black ^b	27	28	32	28	26	27
Hispanic ^c	20	25	26	23	23	24
Other	22	25	25	23	22	21
Marital status						
Married	24	26	28	26	26	—
Single	19	20	23	20	19	—

^aData for 1996 are preliminary.

^bIncludes persons of Hispanic origin.

^cPersons of Hispanic origin may be of any race.

Sources: Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45 (11, Supp.). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report; 1996 preliminary data from Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46 (1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

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Education and Achievement

EA 1.1

EARLY CHILDHOOD PROGRAM ENROLLMENT

Enrollment in an early childhood program is one indicator of readiness to learn in elementary school that may be especially relevant for children from disadvantaged backgrounds. One of the National Education Goals for the year 2000, adopted by Congress, is that "all children will have access to high-quality and developmentally appropriate preschool programs that help prepare children for school."¹ Table EA 1.1 presents the percentage of children, ages 3 and 4, enrolled in center-based programs.² Center-based programs include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

In 1996, over half (53 percent) of all 3- to 4-year-old children were enrolled in a center-based program. This reflects a modest increase from 51 percent in 1991 and 1993 (see Table EA 1.1).

Differences by Race and Hispanic Origin.³ There are notable differences in early childhood program enrollment rates among racial and ethnic groups; for example, in 1996, only 37 percent of Hispanic children were enrolled in an early childhood program, compared with 54 percent of whites and 63 percent of blacks. Throughout the 1990s, black 3- to 4-year-olds have had the highest enrollments in early childhood programs, followed closely by whites, with much lower enrollments among Hispanics (see Figure EA 1.1.A).

Differences by Socioeconomic Status. There are substantial differences in center-based enrollments by socioeconomic status, including poverty status and maternal education (see Figure EA 1.1.B).

- In 1996, enrollments were much higher among families that were above the poverty threshold (58 percent) than those who were at or below the poverty threshold (41 percent).
- Enrollments also differ by maternal education, with the highest enrollment (71 percent) among children whose mothers were college graduates and the lowest (37 percent) among children whose mothers lacked a high school diploma.

These differences by socioeconomic status were apparent for all years reported (see Table EA 1.1).

Differences by Mother's Employment Status. There are also differences in enrollments by maternal employment status (see Figure EA 1.1.B); for example, in 1996, children whose mothers were working either full-time (35 hours or more per week) or part-time (less than 35 hours per week) had substantially higher enrollments than children whose mothers were not in the labor force. These differences have been apparent since 1991.

¹National Education Goals Panel. 1997. *The National Education Goals Report: Building a Nation of Learners, 1997* (Goal 1, p. xiv). Washington, D.C.: U.S. Government Printing Office.

²Estimates are based on children who have yet to enter kindergarten.

³Estimates for whites and blacks exclude Hispanics of those races.

Table EA 1.1

Percentage of 3- and 4-year-olds^a in the United States enrolled in center-based programs,^b by child and family characteristics: 1991, 1993, 1995, and 1996

	1991	1993	1995	1996
Total	51	51	53	53
Gender				
Male	51	50	52	52
Female	52	52	53	53
Race and Hispanic origin^c				
White, non-Hispanic	53	52	55	54
Black, non-Hispanic	56	56	57	63
Hispanic	38	42	34	37
Poverty status				
At or above poverty	54	55	58	58
Below poverty	42	42	41	41
Family structure^d				
Two parents	52	51	53	51
One or no parent	47	52	53	56
Mother's education^e				
Less than high school	30	31	31	37
High school/GED	44	41	45	46
Vocational/technical or some college	59	58	55	55
College graduate	72	72	73	71
Mother's employment status^f				
35 hours or more per week	58	59	58	62
Less than 35 hours per week	57	55	60	62
Not in labor force	43	43	43	41

^aEstimates are based on children who have not yet entered kindergarten.

^bCenter-based programs include day care centers, Head Start programs, preschools, prekindergartens, and other early childhood programs.

^cPersons of Hispanic origin may be of any race.

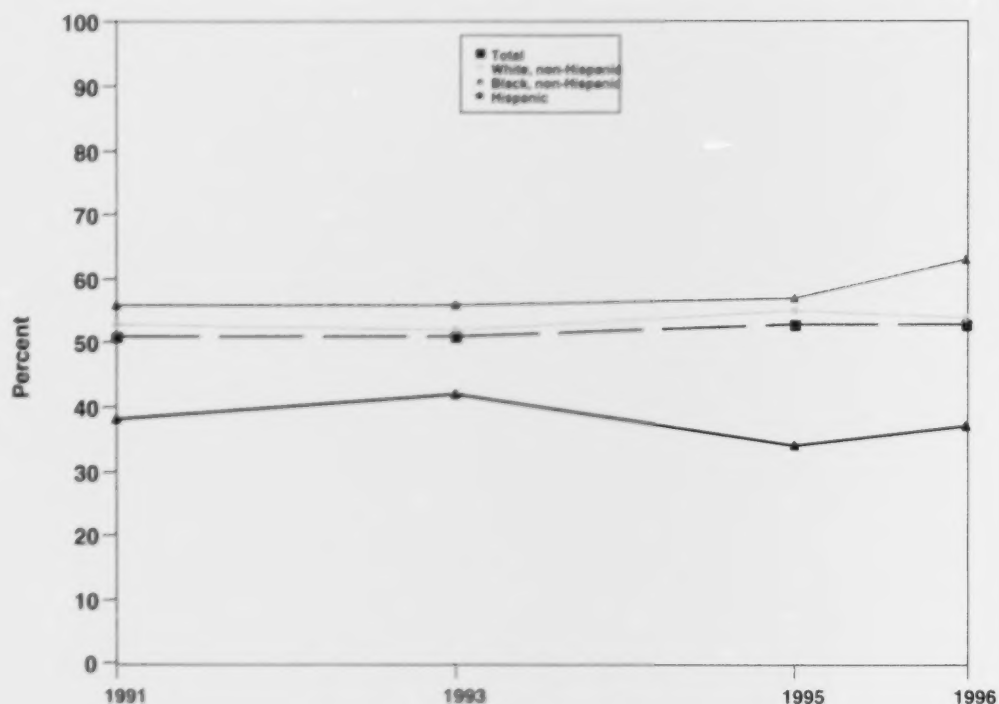
^dParents include any combination of a biological, adoptive, step, and foster mother and/or father. No parents in the household indicates that the child is living with non-parent guardians (e.g., grandparents).

^eChildren without mothers in the home are not included in estimates dealing with mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grandmother) who resides in the home with the child.

Source: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, 1995, and 1996 National Household Education Survey.

Figure EA 1.1.A

Percentage of 3- and 4-year-olds^a in the United States enrolled in center-based programs,^b by race and Hispanic origin:^c 1991, 1993, 1995, and 1996



^aEstimates are based on children who have not yet entered kindergarten.

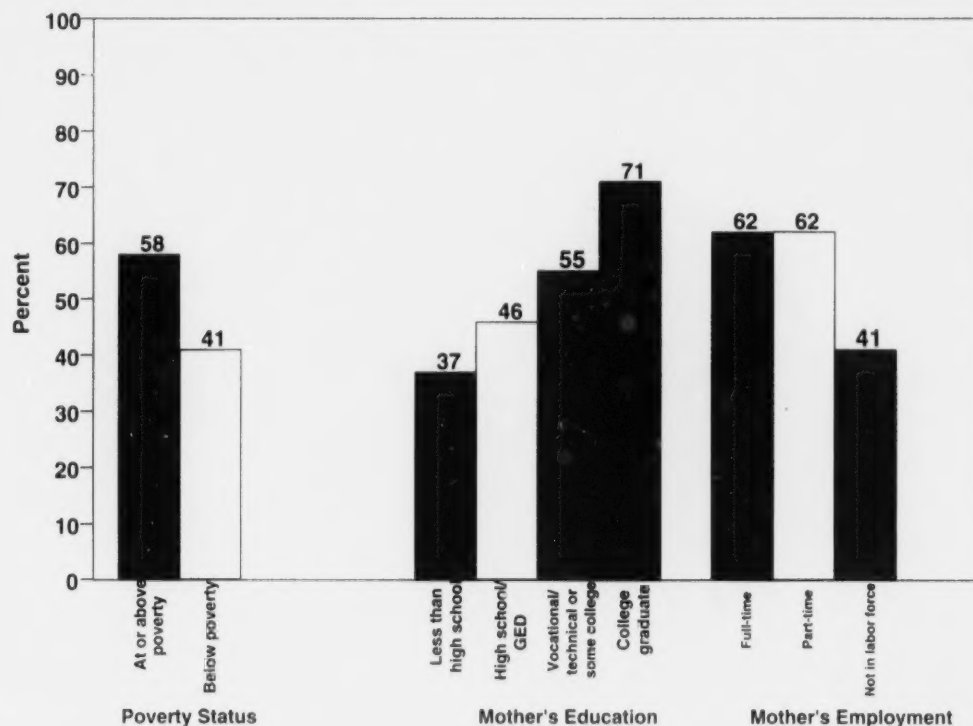
^bCenter-based programs include day care centers, Head Start programs, preschools, nursery schools, prekindergartens, and other early childhood programs.

^cPersons of Hispanic origin may be of any race.

Source: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, 1995, and 1996 National Household Education Survey.

Figure EA 1.1.B

Percentage of 3- and 4-year-olds^a in the United States enrolled in center-based programs,^b by poverty status, mother's education, and mother's employment status:^c 1996



^aEstimates are based on children who have not yet entered kindergarten.

^bCenter-based programs include day care centers, Head Start programs, preschools, nursery schools, prekindergartens, and other early childhood programs.

^cChildren without mothers in the home are not included in estimates dealing with mother's education or mother's employment status.

Source: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, 1995, and 1996 National Household Education Survey.

EA 1.2

GRADE RETENTION: PERCENTAGE OF CURRENT 2ND GRADERS WHO WERE RETAINED IN KINDERGARTEN AND/OR 1ST GRADE

Children's early primary school experiences are associated with their adjustment to school and their later school success. Grade retention (repeating a grade) at an early age may indicate that a child has started school without adequate preparation and may continue to experience school problems in subsequent years. It may also measure the degree to which schools are able to respond to children from a variety of backgrounds.⁴

Table EA 1.2 presents data on the percentage of 2nd grade students who were retained in kindergarten and/or 1st grade as reported by their parents. Estimates are presented for 1991, 1993, and 1995. These data indicate that 11 percent of 2nd grade children in 1991 had repeated kindergarten and/or 1st grade and 8 percent in 1993 and 1995 had repeated either or both of these grades.

Differences by Gender. Males were more likely than females to have repeated kindergarten and/or 1st grade; for example, in 1995, 11 percent of male 2nd graders had repeated a grade, in comparison with only 5 percent of females (see Table EA 1.2).

Differences by Race and Hispanic Origin.⁵ In 1995, black 2nd graders were more likely than their white peers to have repeated kindergarten and/or 1st grade (see Table EA 1.2). Twelve percent of black children had repeated a grade, compared with 7 percent of white children. Ten percent of Hispanic children repeated kindergarten and/or first grade in 1995. Rates declined substantially for white and Hispanic 2nd graders between 1991 and 1995; for example, among Hispanic children rates dropped by almost half, from 18 percent to 10 percent.

Differences by Socioeconomic Status. Grade repetition differs by family socioeconomic status, measured by poverty status and maternal education levels (see Figure EA 1.2). In 1995, 10 percent of children in poor families had repeated a grade, in comparison with 7 percent of 2nd graders living in nonpoor families. Grade repetition varies by maternal education, with the highest percentage of grade repetition in 1995 among children whose mothers did not complete high school (12 percent) and the lowest percentage among children whose mothers were college graduates (5 percent). Rates of grade repetition among children whose mothers did not complete high school declined substantially between 1991 and 1995, from 21 percent to 12 percent (see Table EA 1.2).

⁴Alexander, K.L., Entwisle, D.R., and Dauber, S.L. 1994. *On the Success of Failure: A Reassessment of the Effects of Retention in the Primary Grades*. New York: Cambridge University Press.

⁵Estimates for whites and blacks exclude Hispanics of those races.

Table EA 1.2

Percentage of 2nd graders in the United States who were retained in kindergarten and/or 1st grade, by child and family characteristics: 1991, 1993, and 1995

	1991	1993	1995
Total	11	8	8
Gender			
Male	13	10	11
Female	9	7	5
Race and Hispanic origin^a			
White non-Hispanic	9	7	7
Black non-Hispanic	15	12	12
Hispanic	18	11	10
Poverty status			
At or above poverty	9	8	7
Below poverty	18	10	10
Family structure^b			
Two parents	10	7	8
One or no parent	14	11	9
Mother's education^c			
Less than high school	21	15	12
High school/GED	12	9	9
Vocational/technical or some college	9	6	7
College graduate	4	5	5
Mother's employment status^c			
35 hours or more per week	12	8	9
Less than 35 hours per week	8	8	6
Not in labor force	11	9	8

^aPersons of Hispanic origin may be of any race.

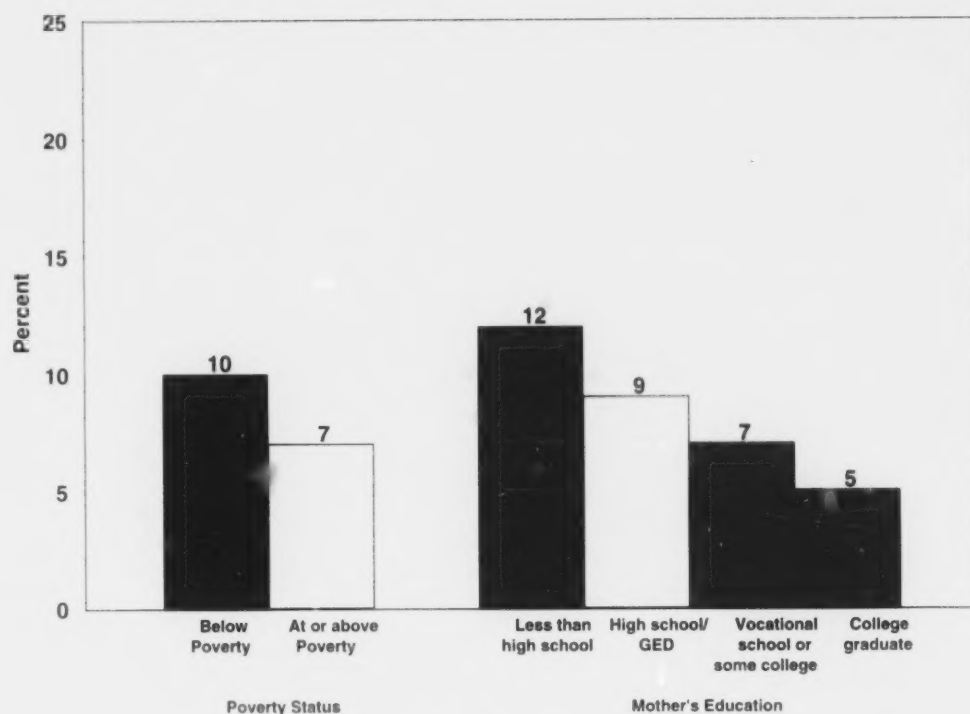
^bParents include any combination of a biological, adoptive, step, and foster mother and/or father. No parents in the household indicates that the child is living with non-parent guardians (e.g., grandparents).

^cChildren without mothers in the home are not included in estimates dealing with mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grandmother) who resides in the home with the child.

Source: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, and 1995 National Household Education Survey.

Figure EA 1.2

Percentage of 2nd graders in the United States who were retained in kindergarten and/or 1st grade, by poverty status and mother's education:^a 1995



^aChildren without mothers in the home are not included in estimates dealing with mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grandmother) who resides in the home with the child.

Source: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, and 1995 National Household Education Survey.

EA 1.3

SCHOOL ABSENTEEISM

Student absenteeism is associated with poor achievement in school, among other outcomes; for example, absenteeism is one of five personal and family background factors that accounted for 91 percent of the variation in states' mathematics scores in a recent national report.⁶

Differences across Grade Levels. The percentage of 8th-grade students who were absent from school three or more days in the preceding month has remained relatively constant at around 23 percent between 1990 and 1996 (see Table EA 1.3). During the same time period, a slightly larger percentage of 12th-grade students were absent from school for that length of time, with percentages ranging between 26 and 31 percent.

Differences by Race and Hispanic Origin.⁷ Among 8th graders in 1996, American Indian and Hispanic students, at 29 percent, were the most likely to have been absent three or more days in the preceding month. White and Asian students had the lowest absentee rates at 21 and 18 percent, respectively, followed by black students at 25 percent. The patterns are similar for 12th-grade students, though the differences range from lows of 26 to 28 percent for white, Asian, and black students, to a high of 30 percent for American Indians.

Differences by Parents' Education Level. Absentee rates among students also differ by parents' educational levels (see Figure EA 1.3). Absences from school were highest for students whose parents have less than a high school education. In 1996, for example, 32 percent of 8th graders whose parents lacked a high school diploma were absent from school three or more days in the preceding month, compared with 18 percent of their peers who had at least one parent with a college degree. Similar differences were reported for 12th-grade students.

Differences by Type of School. Students who attended private or Catholic schools experienced fewer school absences than did students from public schools, across all grades and years (see Table EA 1.3).

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⁶National Education Goals Panel. 1994. *The National Education Goals Report: Building a Nation of Learners, 1994*. Washington, D.C.: U.S. Government Printing Office.

⁷Estimates for whites and blacks exclude Hispanics of those races.

Table EA 1.3

Percentage of 8th- and 12th-grade students in the United States who were absent from school three or more days in the preceding month, by gender, race and Hispanic origin,^a parents' education level, and type of school: 1990, 1992, 1994, and 1996

	8th Grade				12th Grade			
	1990	1992	1994	1996	1990	1992	1994	1996
Total	23	22	22	23	31	26	28	26
Gender								
Male	21	21	22	22	29	24	27	25
Female	24	24	22	23	32	27	28	28
Race and Hispanic origin^a								
White, non-Hispanic	22	21	20	21	31	24	26	26
Black, non-Hispanic	23	22	27	25	30	29	32	28
Hispanic	26	31	28	29	34	32	32	29
Asian/Pacific American	9	12	21	18	32	19	28	26
American Indian/Alaskan Native	37	38	39	29	—	—	53	30
Parents' education level								
Less than high school	38	31	33	32	41	30	36	35
Graduated high school	27	23	26	26	34	28	30	30
Some education after high school	22	21	22	23	31	26	27	30
Graduated college	15	19	18	18	27	23	25	21
Type of school								
Public	23	23	23	23	31	27	28	28
Nonpublic	13	14	15	16	24	17	21	18

— = not available; sample size is insufficient to permit a reliable estimate.

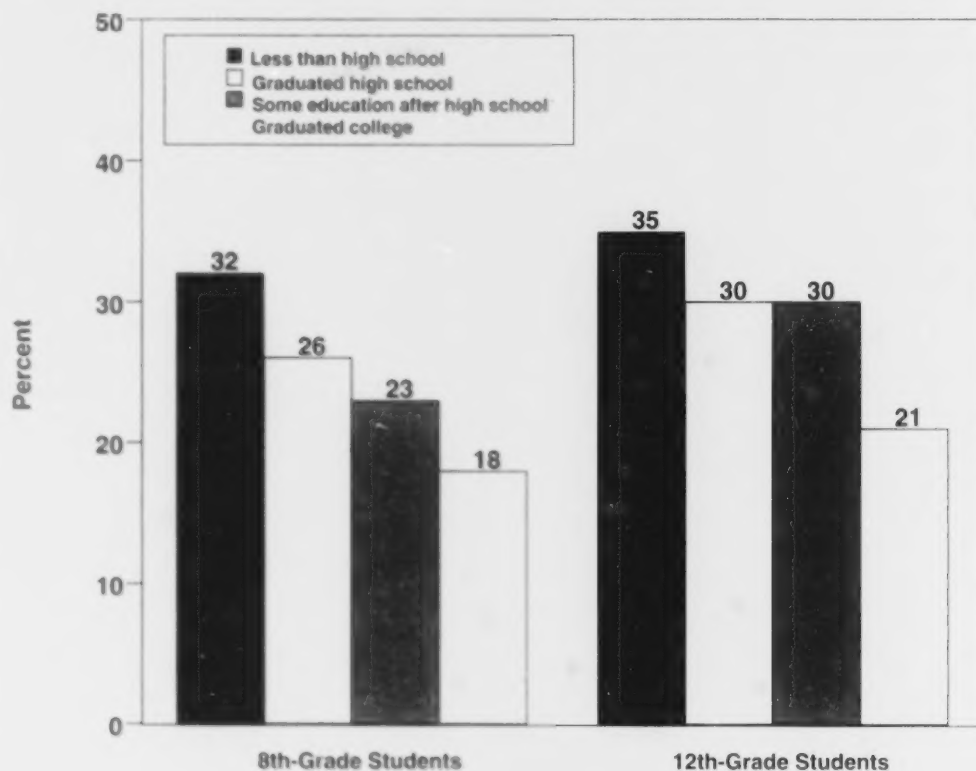
^aPersons of Hispanic origin may be of any race.

Note: The sample for this table is based on the 1990, 1992, and 1996 National Mathematics Assessments, and 1994 National Reading Assessment.

Sources: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, 1994, and 1996 Data Almanacs. National Mathematics Assessment data may be found at <http://nces.ed.gov/naep/tables96/index.html> (Question #15, S004001). National Reading Assessment data (1994) are from unpublished data almanacs.

Figure EA 1.3

Percentage of 8th- and 12th-grade students in the United States who were absent from school three or more days in the preceding month, by parents' education level: 1996



Note: The data for this figure come from the 1996 National Mathematics Assessment.

Sources: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, 1994, and 1996 Data Almanacs. National Mathematics Assessment data may be found at <http://nces.ed.gov/naep/tables96/index.html> (Question #15, S004001). National Reading Assessment data (1994) are from unpublished data almanacs.

EA 1.4

HIGH SCHOOL DROPOUTS: EVENT DROPOUT RATE FOR GRADES 10 THROUGH 12

High school dropouts have lower earnings, experience more unemployment, and are more likely to end up on welfare and in prison than their peers who complete high school or college.⁸ Women who drop out of high school are more likely to become pregnant and give birth at a young age, and are more likely to become single parents.⁹

Table EA 1.4 shows the event dropout rate (percentage) for students in grades 10 through 12, ages 15 through 24. Event dropout rates measure the proportion of students enrolled in grades 10 through 12 one year earlier, who were not enrolled and who had not completed high school in the year the data are reported. From 1975 to 1996, dropout rates have fluctuated between 4 percent and 7 percent.¹⁰ While the event dropout rate appears higher in recent years, the observed differences may be due to changes in census methodology.

Differences by Race and Hispanic Origin.¹¹ In 1996, Hispanics had a higher dropout rate (9 percent) than whites (4 percent). The event dropout rate for blacks (7 percent) fell in between these two groups (see Figure EA 1.4).¹²

⁸McMillen, M., and Kaufman, P. 1997. *Dropout Rates in the United States: 1996*. NCES 98-250. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.

⁹McMillen, M., and Kaufman, P. 1994. *Dropout Rates in the United States: 1994*. NCES 96-863. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics; Manlove, J. Forthcoming. "The Influence of High School Dropout and School Disengagement on the Risk of School-age Pregnancy." *Journal of Research on Adolescence*.

¹⁰The event dropout rate reached 7 percent in the years 1974, 1977, 1978, and 1979. Data for these years are not shown in Table EA 1.4.

¹¹Estimates for whites and blacks exclude Hispanics of those races.

¹²The finding that Hispanics are more at risk of dropping out of school than either blacks or whites has been confirmed in other national data sets, such as High School and Beyond and the National Education Longitudinal Study (Ekstron, R., Goertz, M., Pollack, J., & Rock, D. 1987. Who drops out of high school and why? Findings from a National Study. In G. Natriello (ed.), *School dropouts: Patterns and policies* (pp. 52-69). New York: Teachers College Press; McMillen, M. and Kaufman, P. 1994. *Dropout Rates in the United States: 1994*. NCES 96-863. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics).

Table EA 1.4

Event dropout rate^a (percentage) for youth in the United States in grades 10 through 12 (ages 15 through 24), by gender and by race and Hispanic origin:^b selected years, 1975-1996

	1975	1980	1985	1990 ^c	1991 ^c	1992 ^{c,d}	1993 ^{c,d}	1994 ^{c,d,e}	1995	1996
Total	6	6	5	4	4	4	5	5	6	5
White, non-Hispanic										
Total	5	5	4	3	3	4	4	4	5	4
Male	5	6	5	4	3	4	4	4	5	4
Female	5	5	4	3	4	4	4	4	4	4
Black, non-Hispanic										
Total	9	8	8	5	6	5	6	7	6	7
Male	8	8	8	4	5	3	6	7	8	5
Female	9	9	7	6	7	7	5	6	5	9
Hispanic^b										
Total	11	12	10	8	7	8	7	10	12	9
Male	10	18	9	9	10	8	5	9	12	10
Female	12	7	10	7	5	9	8	11	13	8

^aThe event dropout rate is the proportion of students enrolled in grades 10 through 12 one year earlier who were not enrolled and not graduated in the year for which the data are presented.

^bPersons of Hispanic origin may be of any race.

^cNumbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

^dNumbers for these years reflect new wording of the educational attainment item in the Current Population Survey (CPS).

^eNumbers in this year may reflect changes in CPS due to newly instituted computer-assisted interviewing and/or due to the change in the population controls used this year to the 1990 Census-based estimates, with adjustments for undercount.

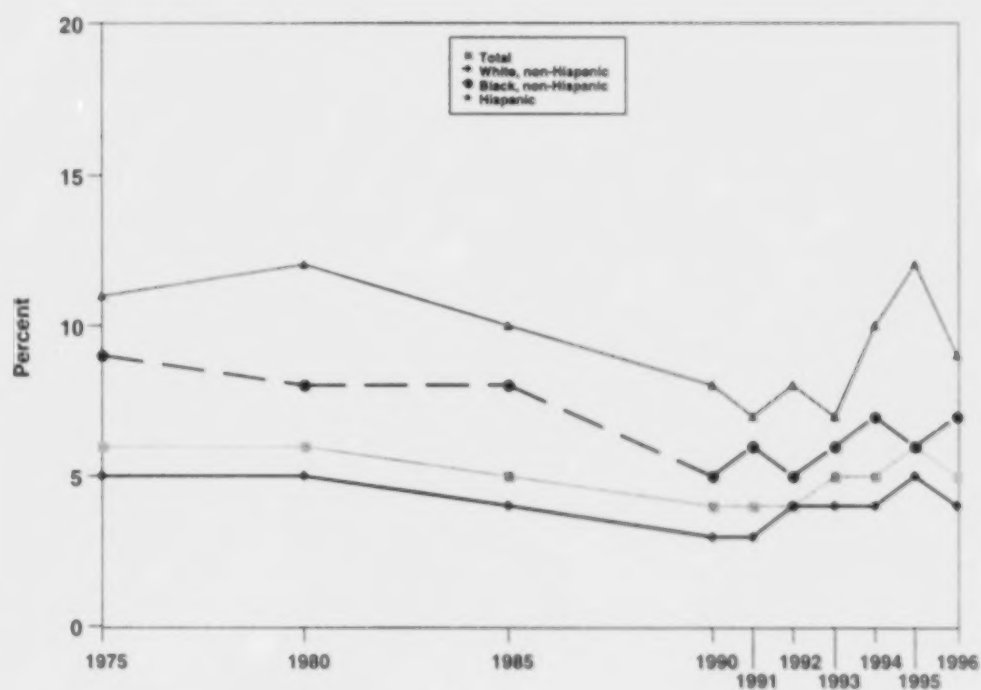
Note: Event dropout rates are calculated using the Current Population Survey data from October of a given year.

Sources: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations; U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1993, 1994, 1995, 1996*.

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Figure EA 1.4

Event dropout rate for youth in the United States in grades 10 through 12 (ages 15 through 24), by race and Hispanic origin:^a selected years, 1975-1996



^aPersons of Hispanic origin may be of any race.

Note: The event dropout rate is the proportion of students enrolled in grades 10 through 12 one year earlier who were not enrolled and not graduated in the year for which the data are presented.

Sources: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations; U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1993, 1994, 1995, 1996*.

EA 1.5

HIGH SCHOOL COMPLETION RATES FOR 18- THROUGH 24-YEAR-OLDS

High school graduates earn substantially more than persons who leave high school without graduating.¹³ Table EA 1.5 presents the high school completion rates for 18- through 24-year-olds who were not still enrolled in a high school program—i.e., the percentage in this age group who have received a high school diploma or its equivalent, such as passing the General Educational Development (GED) exam. In 1996, the high school completion rate was 86 percent. As can be seen in Table EA 1.5, most students receive a high school diploma rather than an equivalent credential (76 percent versus 10 percent, respectively). Between 1972 and 1996, the completion rate has varied between 83 percent and 86 percent (see Table EA 1.5).

Differences by Race and Hispanic Origin.¹⁴ As Figure EA 1.5 shows, completion rates vary dramatically by race and Hispanic origin. Hispanics have had much lower high school completion rates than either blacks or whites since the early 1970s. The high school completion rate for Hispanics in 1996 was only 62 percent, compared with 83 percent for blacks and 92 percent for whites. This suggests that many Hispanic youth and young adults will be less prepared than other 18- through 24-year-olds to enter or progress in the labor force. While completion rates for Hispanics have remained fairly constant since the early 1970s, completion rates for blacks rose from 72 percent in 1972 to 83 percent in 1990, and have remained at that level through 1996. Completion rates have also increased among whites, but to a lesser extent, so that the gap between black and white completion rates has narrowed over time (see Figure EA 1.5).

¹³U.S. Bureau of the Census. 1997. *Current Population Reports, P60-197. Money Income in the United States: 1996 (with Separate Data on Valuation of Noncash Benefits)* (Table 7). Washington, D.C.: U.S. Government Printing Office; U.S. Department of Education, National Center for Education Statistics. 1996. *Condition of Education 1996* (Indicators 32 and 34). Washington, D.C.: U.S. Government Printing Office.

¹⁴Estimates for whites and blacks exclude Hispanics of those races.

Table EA 1.5

High school completion rates (percentage) and method of completion for 18- through 24-year-olds,^a in the United States, by race and Hispanic origin:^b selected years, 1972-1996

Completion method	1972	1975	1980	1985	1990	1991	1992 ^c	1993 ^c	1994 ^{c,d}	1995 ^{c,d}	1996
Total											
Completed	83	84	84	85	86	85	86	86	86	85	86
Diploma	—	—	—	—	81	81	81	81	79	78	76
Equivalent ^e	—	—	—	—	5	4	5	5	7	8	10
White, non-Hispanic											
Completed	86	87	88	88	90	89	91	90	91	90	92
Diploma	—	—	—	—	85	85	86	86	84	83	81
Equivalent ^e	—	—	—	—	5	4	5	5	6	7	11
Black, non-Hispanic											
Completed	72	70	75	81	83	83	82	82	83	85	83
Diploma	—	—	—	—	78	77	76	76	75	75	73
Equivalent ^e	—	—	—	—	5	5	6	6	8	9	10
Hispanic^b											
Completed	56	62	57	67	59	57	62	64	62	63	62
Diploma	—	—	—	—	55	53	57	58	54	54	55
Equivalent ^e	—	—	—	—	4	3	6	6	8	9	7

^aRefers to persons not currently enrolled in high school or below.

^bPersons of Hispanic origin may be of any race.

^cNumbers for these years reflect new wording of the educational attainment item in the Current Population Survey (CPS).

^dNumbers for these years may reflect changes in CPS due to newly instituted computer-assisted interviewing and/or due to the change in the population controls used.

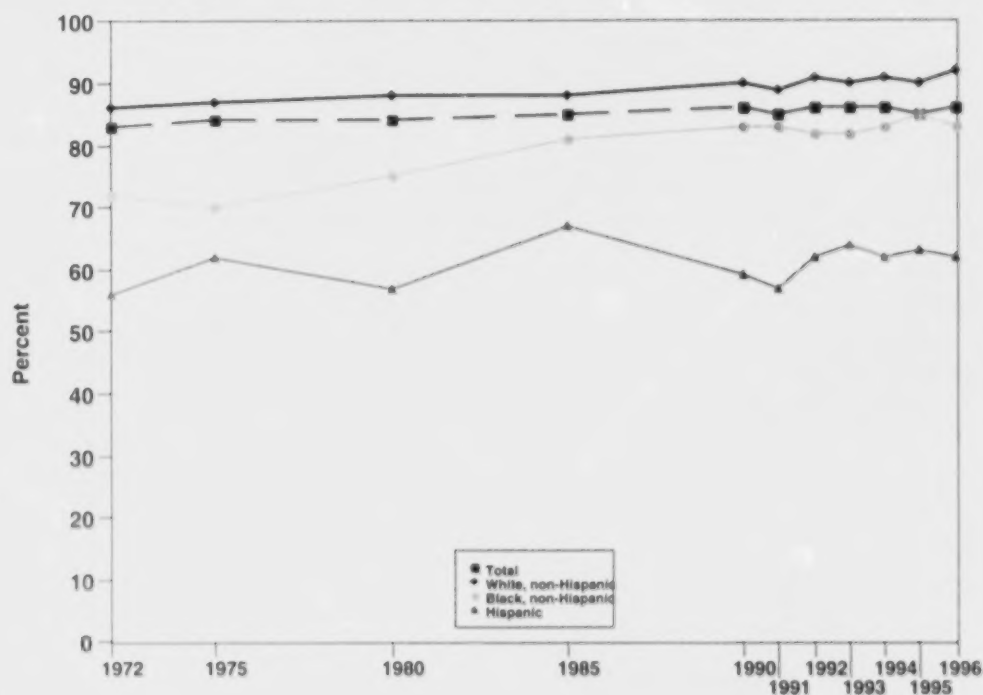
^eDiploma equivalents include passing the General Educational Development (GED) exam.

Note: High school completion rates are calculated using the Current Population Survey data from October of a given year.

Sources: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years); U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States*: 1994, 1995, 1996.

Figure EA 1.5

High school completion rates for 18- through 24-year-olds^a in the United States, by race and Hispanic origin:^b selected years, 1972-1996



^aRefers to persons not currently enrolled in high school or below.

^bPersons of Hispanic origin may be of any race.

Sources: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years); U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1994, 1995, 1996*.

EA 1.6

COLLEGE ATTENDANCE AND ATTAINMENT

College attendance and receipt of a bachelor's degree increase employment opportunities and income potential. One of the National Education Goals for the year 2000, adopted by Congress, is for adult literacy and lifelong learning, with an objective of increasing the proportion of qualified students, especially minorities, who enter college, who complete at least two years, and who complete their degree programs.¹⁵

Table EA 1.6 presents the percentage of 25- through 29-year-old high school graduates who had completed at least some college and the percentage who had received a bachelor's degree or higher:¹⁶

- In 1997, 65 percent of high school graduates in this age group had completed some college, 9 percent of high school graduates received an associate's degree, and 32 percent had received at least a bachelor's degree.¹⁷
- College attendance has increased since the early 1970s. The percentage of high school graduates completing at least some college rose from 44 percent in 1971 to 65 percent in 1997 (see Figure EA 1.6.A).
- College completion, defined here as receipt of a bachelor's degree, increased more modestly, from 22 percent of 25- to 29-year-old high school graduates in 1971 to 32 percent of this group in 1997 (see Figure EA 1.6.B).

Differences by Race and Hispanic Origin.¹⁸ In 1997, white high school graduates were far more likely (35 percent) than their black (16 percent) or Hispanic peers (18 percent) to have received a bachelor's degree or higher. Whites were also more likely to have attended college (68 percent) than blacks or Hispanics (54 percent) in 1997. Whites have had far higher rates of attendance and completion than blacks or Hispanics since the early 1970s, and the gap between whites and the other two racial/ethnic groups in college attendance and completion has not decreased over time (see Figures EA 1.6.A and EA 1.6.B).

¹⁵National Education Goals Panel. 1997. *The National Education Goals Report: Building a Nation of Learners, 1997* (Goal 6, p. xvi). Washington, D.C.: U.S. Government Printing Office.

¹⁶Note that the measure of college attendance changed from "one or more years of college" in 1971-1991 to "some college or more" in 1992-1997. Similarly, the measure of college completion changed from "four or more years of college" in 1971-1991 to "bachelor's degree or higher" in 1992-1997.

¹⁷Based on analyses of the 1993 Baccalaureate and Beyond Longitudinal study, it is estimated that about 10 percent of all persons with a bachelor's degree also hold an associate's degree. National Center for Education Statistics.

¹⁸Estimates for whites and blacks exclude Hispanics of those races.

Table EA 1.6

Percentage of 25- through 29-year-old high school graduates^a in the United States who have attended some college or who have received a bachelor's degree or higher, by race and Hispanic origin:^b selected years, 1971-1997

	1971	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Some college or more^c												
Total	44	50	52	51	52	53	57	59	61	62	65	65
Race and Hispanic origin^b												
White, non-Hispanic	45	51	54	52	54	55	59	61	63	65	67	68
Black, non-Hispanic	31	39	42	43	44	43	45	48	50	52	56	54
Hispanic	31	41	40	44	40	42	47	49	52	50	51	54
Bachelor's degree or higher^d												
Total	22	26	26	26	27	27	27	27	27	28	31	32
Race and Hispanic origin^b												
White, non-Hispanic	23	28	28	27	29	30	30	30	30	31	34	35
Black, non-Hispanic	12	15	15	14	16	13	14	16	16	18	17	16
Hispanic	11	17	13	18	14	16	16	14	13	16	16	18
Associate's degree												
Total	—	—	—	—	—	—	8	9	10	10	10	9
Race and Hispanic origin^b												
White, non-Hispanic	—	—	—	—	—	—	8	9	10	10	10	9
Black, non-Hispanic	—	—	—	—	—	—	8	6	8	8	8	7
Hispanic	—	—	—	—	—	—	7	8	9	7	8	9

— = not available

^aHigh school completion or high school graduate is defined as 12 years of school completed for 1971-1991, and high school diploma or equivalency certificate for 1992-1997. Beginning in 1992, the Current Population Survey (CPS) changed the questions used to obtain educational attainment of respondents.

^bPersons of Hispanic origin may be of any race.

^cThis was measured as "one or more years of college" for 1971-1991, and as "some college or more" for 1992-1997.

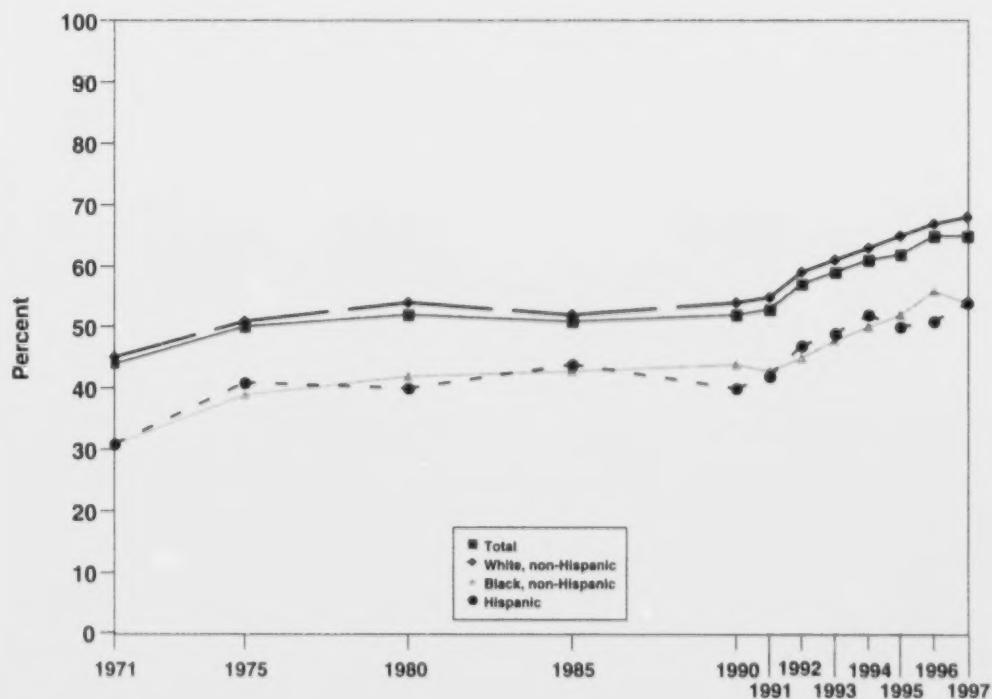
^dThis was measured as "four or more years of college" for 1971-1991, and as "bachelor's degree or higher" for 1992-1997.

Note: Based on analyses of the 1993 Baccalaureate and Beyond Longitudinal study, it is estimated that about 10 percent of all persons with a bachelor's degree also hold an associate's degree. National Center for Education Statistics.

Source: U.S. Department of Education, National Center for Education Statistics. *The Condition of Education* 1997, 1998. Washington, D.C.: U.S. Government Printing Office (based on March Current Population Surveys, U.S. Bureau of the Census).

Figure EA 1.6.A

Percentage of 25- through 29-year-old high school graduates^a in the United States who have attended some college,^b by race and Hispanic origin:
selected years, 1971-1997



^aHigh school completion or high school graduate is defined as 12 years of school completed for 1971-1991, and high school diploma or equivalency certificate for 1992-1997. Beginning in 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents.

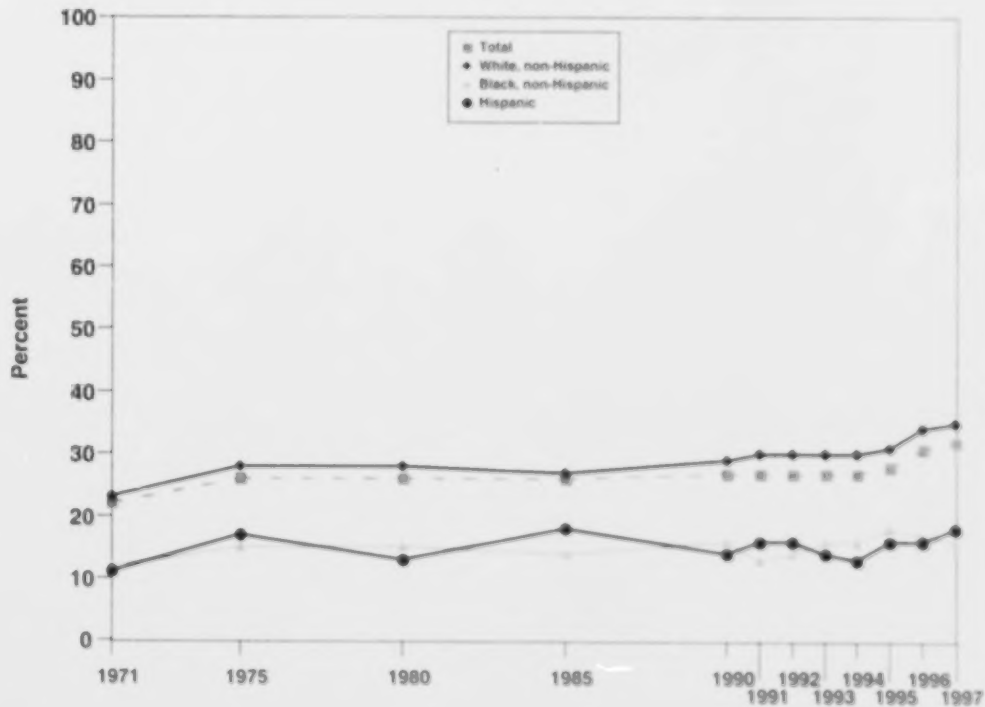
^bThis was measured as "one or more years of college" for 1971-1991, and as "some college or more" for 1992-1997.

^cPersons of Hispanic origin may be of any race.

Source: U.S. Department of Education, National Center for Education Statistics. *The Condition of Education* 1997, 1998. Washington, D.C.: U.S. Government Printing Office (based on March Current Population Surveys, U.S. Bureau of the Census).

Figure EA 1.6.B

Percentage of 25- through 29-year-old high school graduates^a in the United States who have received a bachelor's degree,^b by race and Hispanic origin:^c selected years, 1971-1997



^aHigh school completion or high school graduate is defined as 12 years of school completed for 1971-1991, and high school diploma or equivalency certificate for 1992-1997. Beginning in 1992, the Current Population Survey (CPS) changed the questions used to obtain the educational attainment of respondents.

^bThis was measured as "four or more years of college" for 1971-1991, and as "bachelor's degree or higher" for 1992-1997.

^cPersons of Hispanic origin may be of any race.

Source: U.S. Department of Education, National Center for Education Statistics. *The Condition of Education 1997, 1998*. Washington, D.C.: U.S. Government Printing Office (based on March Current Population Surveys, U.S. Bureau of the Census).

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EA 2.1

READING PROFICIENCY FOR CHILDREN AGES 9, 13, AND 17

Literacy proficiency and reading achievement are vital to educational reform efforts in the United States.¹⁹ One of the National Education Goals for the year 2000, adopted by Congress, is for adult literacy and lifelong learning, with objectives of having all students demonstrate competency in English and having all adults be literate.²⁰ Levels of reading achievement will help measure the extent to which these goals are being met.

In order to monitor progress in the reading achievement of students in the United States, the National Assessment of Educational Progress (NAEP) has conducted national assessments of the reading performance of 9-, 13-, and 17-year-olds. There are five levels of reading proficiency reported by NAEP, ranging from Level 150 (completing simple, discrete reading tasks) to Level 350 (learning from specialized reading materials).²¹ The following tables report the average reading proficiency scores of students in the three age groups between 1971 and 1996.

Trends in Reading Proficiency Scores. Among 9-year-olds, average reading proficiency scores improved between 1971 and 1980, declined between 1980 and 1984, and remained steady until 1996, so that the average score in 1996 (212) was similar to the score in 1975 (210) (see Table EA 2.1.A). Among 13-year-olds, average reading proficiency scores varied from year to year, and were similar in 1996 (259) and 1971 (255) (see Table EA 2.1.B). Among 17-year-olds, average scores increased between 1971 and 1988, remained stable between 1988 and 1992, and then showed a slight decline through 1996, so that the average score in 1996 (287) was similar to the score in 1975 (286) (see Table EA 2.1.C).

Differences by Gender. Females have scored consistently higher than males over time and for all ages. For example, among 13-year-olds in 1996, females had an average score of 265, compared with an average score of 253 for males (see Table EA 2.1.B).

Differences by Race and Hispanic Origin.²² There are large and consistent differences in reading proficiency by race and Hispanic origin among all age groups; for example, among 17-year-olds in 1996, whites had higher average reading proficiency scores (294) than either blacks (265) or Hispanics (265) (see Table EA 2.1.C). However, black 17-year-olds had especially high gains in achievement relative to whites in the 1980s; thus, the gaps in reading proficiency scores between whites and blacks have narrowed since the mid-1970s among 17-year-olds (see Figure EA 2.1).

Differences by Parents' Education Level. Average reading proficiency levels vary dramatically by parents' education level;²³ for example, among 13-year-olds and 17-year-olds in 1996, the lowest average reading proficiency scores were among teens whose parents did not have a high school education, while the highest scores were among teens who had a parent with post high school education. In fact, the average reading proficiency score among 13-year-old children of parents with post high school education levels (270) was similar to the average score among 17-year-old children of parents without a high school degree (267) (see Tables EA 2.1.B and EA 2.1.C).

Differences by Type of School. Average reading proficiency scores have been consistently higher among students attending nonpublic schools than among students attending public schools. This is true for every age group and every year reported (see Tables EA 2.1.A, EA 2.1.B, and EA 2.1.C).

¹⁹Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics.

²⁰National Education Goals Panel. 1997. *The National Education Goals Report: Building a Nation of Learners, 1997* (Goal 6, p. xvi). Washington, D.C.: U.S. Government Printing Office.

²¹NAEP has regularly been conducting assessments of students in public and private schools in the United States in order to monitor trends in academic achievement in core curriculum areas since the 1970s. NAEP uses proficiency scales that range from 0 to 500. To give meaning to the results, students' performance is characterized at five levels along the proficiency scales (150, 200, 250, 300, 350).

²²Estimates for whites and blacks exclude Hispanics of those races.

²³Parents' education level is not reported at age 9 because approximately one-third of these students did not know their parents' education level.

Table EA 2.1.A

Average reading proficiency for children age 9 in the United States, by gender, race and Hispanic origin,^a and type of school: selected years, 1971-1996

	1971	1975	1980	1984	1988	1990	1992	1994	1996
Total	208	210	215	211	212	209	211	211	212
Gender									
Male	201	204	210	208	208	204	206	207	207
Female	214	216	220	214	216	215	215	215	218
Race and Hispanic origin^a									
White, non-Hispanic	214	217	221	218	218	217	218	218	220
Black, non-Hispanic	170	181	189	186	189	182	185	185	190
Hispanic	—	183	190	187	194	189	192	186	194
Type of school									
Public	—	—	214	209	210	208	209	209	210
Nonpublic	—	—	227	223	223	228	225	225	227

^aPersons of Hispanic origin may be of any race.

Note: The reading proficiency scale ranges from 0 to 500:

Level 150: Simple, discrete reading tasks

Level 200: Partial skills and understanding

Level 250: Interrelates ideas and makes generalizations

Level 300: Understands complicated information

Level 350: Learns from specialized reading materials

Source: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics.

Table EA 2.1.B

Average reading proficiency for children age 13 in the United States, by gender, race and Hispanic origin,^a parents' education level, and type of school: selected years, 1971-1996

	1971	1975	1980	1984	1988	1990	1992	1994	1996
Total	255	256	259	257	258	257	260	258	259
Gender									
Male	250	250	254	253	252	251	254	251	253
Female	261	262	263	262	263	263	265	266	265
Race and Hispanic origin^a									
White, non-Hispanic	261	262	264	263	261	262	266	265	267
Black, non Hispanic	222	226	233	236	243	242	238	234	236
Hispanic	—	233	237	240	240	238	239	235	240
Parents' education level									
Less than high school	238	239	239	240	247	241	239	237	241
Graduated high school	256	255	254	253	253	251	252	251	252
Some education after high school	270	270	271	268	265	267	270	269	270
Type of school									
Public	—	—	257	255	256	255	257	256	257
Nonpublic	—	—	271	271	268	270	276	276	274

— = not available

^aPersons of Hispanic origin may be of any race.

Note: The reading proficiency scale ranges from 0 to 500:

Level 150: Simple, discrete reading tasks

Level 200: Partial skills and understanding

Level 250: Interrelates ideas and makes generalizations

Level 300: Understands complicated information

Level 350: Learns from specialized reading materials

Source: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics.

Table EA 2.1.C

Average reading proficiency for children age 17 in the United States, by gender, race and Hispanic origin,^a parents' education level, and type of school: selected years, 1971-1996

	1971	1975	1980	1984	1988	1990	1992	1994	1996
Total	285	286	286	289	290	290	290	288	287
Gender									
Male	279	280	282	284	286	284	284	282	280
Female	291	291	289	294	294	297	296	295	294
Race and Hispanic origin^a									
White, non-Hispanic	291	293	293	295	295	297	297	296	294
Black, non Hispanic	239	241	243	264	274	267	261	266	265
Hispanic	—	252	261	268	271	275	271	263	265
Parents' education level									
Less than high school	261	263	262	269	267	270	271	268	267
Graduated high school	283	281	278	281	282	283	281	276	273
Some education after high school	302	301	299	301	300	300	299	299	297
Type of school									
Public	—	—	284	287	289	289	288	286	286
nonpublic	—	—	298	303	300	311	310	306	294

— = not available

^aPersons of Hispanic origin may be of any race.

Note: The reading proficiency scale ranges from 0 to 500:

Level 150: Simple, discrete reading tasks

Level 200: Partial skills and understanding

Level 250: Interrelates ideas and makes generalizations

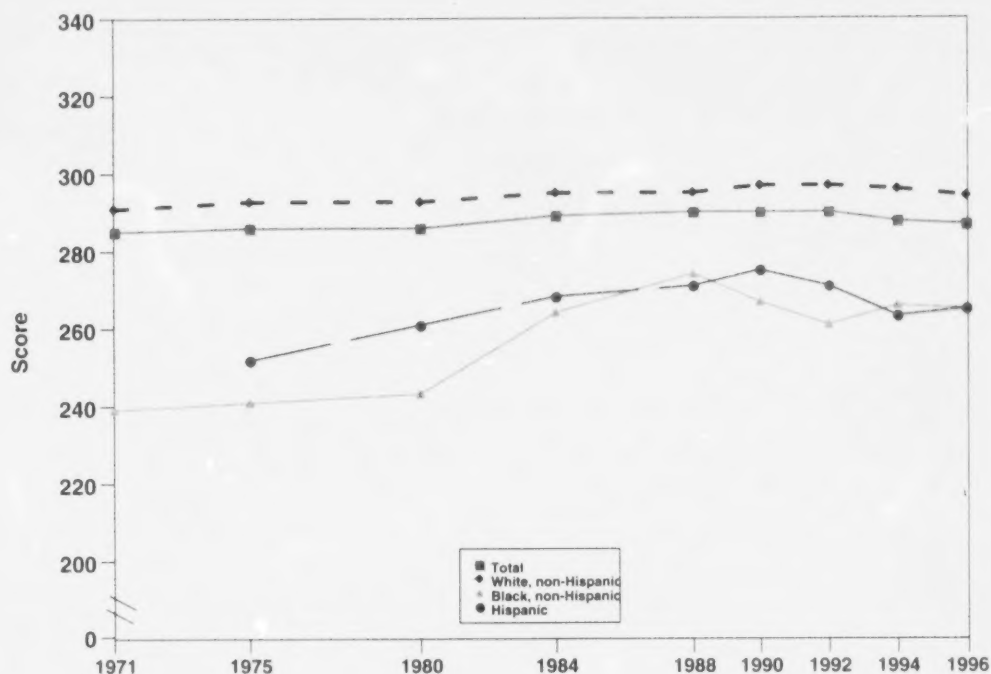
Level 300: Understands complicated information

Level 350: Learns from specialized reading materials

Source: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics.

Figure EA 2.1

Average reading proficiency for children age 17 in the United States, by race and Hispanic origin:^a selected years, 1971 - 1996



^aPersons of Hispanic origin may be of any race.

Note: The reading proficiency scale ranges from 0 to 500.

Level 150: Simple, discrete reading tasks

Level 200: Partial skills and understanding

Level 250: Interrelates ideas and makes generalizations

Level 300: Understands complicated information

Level 350: Learns from specialized reading materials

Source: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics.

EA 2.2

MATHEMATICS PROFICIENCY FOR CHILDREN AGES 9, 13, AND 17

One of the National Education Goals for the year 2000, adopted by Congress, is to improve the relative standing of students in the United States in mathematics achievement.²⁴ In a 1995 comparison of 8th graders in the United States with their peers in 40 other countries, the Third International Math and Science Study showed that students in the United States had significantly lower overall mathematics proficiency scores than students in 20 countries, had similar scores to students in 13 countries, and had higher scores than students in 7 countries.²⁵

In order to monitor progress in the mathematics achievement of students in the United States, the National Assessment of Educational Progress (NAEP) has conducted national assessments of the mathematics performance of 9-, 13-, and 17-year-olds. There are five levels of mathematics proficiency reported by NAEP, ranging from Level 150 (understanding simple arithmetic facts) to Level 350 (multi-step problem solving and algebra).²⁶ The following tables report the average mathematics proficiency scores of students in the three age groups between 1973 and 1996.

Trends in Mathematics Proficiency Scores. Among 9-year-olds, average mathematics proficiency scores remained the same between 1973 and 1982, and then increased substantially to 231 in 1994; scores remained stable from 1994 to 1996 (see Table EA 2.2.A). Among 13-year-olds, mathematics proficiency scores increased between 1978 (264) and 1994 (274); again, scores remained stable from 1994 to 1996 (see Table EA 2.2.B). Among 17-year-olds, average proficiency scores declined between 1973 and 1982, after which they increased and stabilized to a level slightly higher than that obtained in 1973 (307) (see Table EA 2.2.C).

Differences by Gender. In 1996, mathematics proficiency scores were higher for males than for females across all age groups; however, differences are small and in many years were nonexistent for 9- and 13-year-olds. Proficiency scores in 1996 were higher for males by an average of 4 points for 9-year-olds and 13-year-olds, and by an average of 5 points for 17-year-olds.

Differences by Race and Hispanic Origin.²⁷ There are consistently large differences in mathematics proficiency by race and Hispanic origin. For example, among 17-year-olds in 1996, blacks and Hispanics had lower proficiency scores (286 and 292, respectively) than whites (313) (see Table EA 2.2.C); however, black and Hispanic 17-year-olds had substantial gains in achievement between 1973 and 1996 (see Figure EA 2.2).

Differences by Parents' Education Level. There are large variations in average mathematics proficiency levels by level of parental education for 13- and 17-year-olds (see Tables EA 2.2.B and EA 2.2.C).²⁸ For example, in 1996, 13-year-olds whose parents did not have a high school education had the lowest average proficiency scores (254), while those whose parents had graduated from college had the highest scores (283) (see Table EA 2.2.B).

Differences by Type of School. Average mathematics proficiency scores among students in public schools have been consistently lower than average scores among students in nonpublic schools. This is true for every age group and every year reported (see Tables EA 2.2.A, EA 2.2.B, and EA 2.2.C).

²⁴National Education Goals Panel. 1997. *The National Education Goals Report: Building a Nation of Learners, 1997* (Goal 5, p. xvi). Washington, D.C.: U.S. Government Printing Office.

²⁵U.S. Department of Education, National Center for Education Statistics. 1997. *Pursuing Excellence: A Study of U.S. Eighth-Grade Mathematics and Science Teaching, Learning, Curriculum, and Achievement in International Context*. No. 97-198. Washington, D.C.: U.S. Government Printing Office.

²⁶NAEP has regularly been conducting assessments of students in public and private schools in the United States in order to monitor trends in academic achievement in core curriculum areas since the 1970s. NAEP uses proficiency scales that range from 0 to 500. To give meaning to the results, students' performance is characterized at five levels along the proficiency scales (150, 200, 250, 300, 350).

²⁷Estimates for whites and blacks exclude Hispanics of those races.

²⁸Parents' education level is not reported at age 9 because approximately one-third of these students did not know their parent's education level.

Table EA 2.2.A

Average mathematics proficiency for children age 9 in the United States, by gender, race and Hispanic origin,^a and type of school: selected years, 1973-1996

	1973	1978	1982	1986	1990	1992	1994	1996
Total	219	219	219	222	230	230	231	231
Gender								
Male	218	217	217	222	229	231	232	233
Female	220	220	221	222	230	228	230	229
Race and Hispanic origin^a								
White, non-Hispanic	225	224	224	227	235	235	237	237
Black, non-Hispanic	190	192	195	202	208	208	212	212
Hispanic	202	203	204	205	214	212	210	215
Type of school								
Public	—	217	217	220	229	228	229	230
Nonpublic	—	231	232	230	238	242	245	239

— = not available

^aPersons of Hispanic origin may be of any race.

Note: The mathematics proficiency scale ranges from 0 to 500:

Level 150: Simple arithmetic facts

Level 200: Beginning skills and understanding

Level 250: Numerical operations and beginning problem solving

Level 300: Moderately complex procedures and reasoning

Level 350: Multi-step problem solving and algebra

Sources: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics; Data for 1973 appear in *NAEP 1992 Trends in Academic Progress*. Report No. 23-TR01. Washington, D.C.: National Center for Education Statistics.

Table EA 2.2.B

Average mathematics proficiency for children age 13 in the United States, by gender, race and Hispanic origin,^a parents' education level, and type of school: selected years, 1973-1996

	1973	1978	1982	1986	1990	1992	1994	1996
Total	266	264	269	269	270	273	274	274
Gender								
Male	265	264	269	270	271	274	276	276
Female	267	265	268	268	270	272	273	272
Race and Hispanic origin^a								
White, non-Hispanic	274	272	274	274	276	279	281	281
Black, non Hispanic	228	230	240	249	249	250	252	252
Hispanic	239	238	252	254	255	259	256	256
Parents' education level								
Less than high school	—	245	251	252	253	256	255	254
Graduated high school	—	263	263	263	263	263	266	267
Some education after high school	—	273	275	274	277	278	277	278
Graduated college	—	284	282	280	280	283	285	283
Type of school								
Public	—	263	267	269	269	272	273	273
Nonpublic	—	279	281	276	280	283	285	286

— = not available

^aPersons of Hispanic origin may be of any race.

Note: The mathematics proficiency scale ranges from 0 to 500:

Level 150: Simple arithmetic facts

Level 200: Beginning skills and understanding

Level 250: Numerical operations and beginning problem solving

Level 300: Moderately complex procedures and reasoning

Level 350: Multi-step problem solving and algebra

Sources: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics; Data for 1973 appear in *NAEP 1992 Trends in Academic Progress*. Report No. 23-TR01. Washington, D.C.: National Center for Education Statistics.

Table EA 2.2.C

Average mathematics proficiency for children age 17 in the United States, by gender, race and Hispanic origin,^a parents' education level, and type of school: selected years, 1973-1996

	1973	1978	1982	1986	1990	1992	1994	1996
Total	304	300	299	302	305	307	306	307
Gender								
Male	309	304	302	305	306	309	309	310
Female	301	297	296	299	303	305	304	305
Race and Hispanic origin^a								
White, non-Hispanic	310	306	304	308	310	312	312	313
Black, non Hispanic	270	268	272	279	289	286	286	286
Hispanic	277	276	277	283	284	292	291	292
Parents' education level								
Less than high school	—	280	279	279	285	286	284	281
Graduated high school	—	294	293	293	294	298	295	297
Some education after high school	—	305	304	305	308	308	305	307
Graduated college	—	317	312	314	316	316	318	317
Type of school								
Public	—	300	297	301	304	305	304	306
Nonpublic	—	314	311	320	318	320	319	316

— = not available

^aPersons of Hispanic origin may be of any race.

Note: The mathematics proficiency scale ranges from 0 to 500:

Level 150: Simple arithmetic facts

Level 200: Beginning skills and understanding

Level 250: Numerical operations and beginning problem solving

Level 300: Moderately complex procedures and reasoning

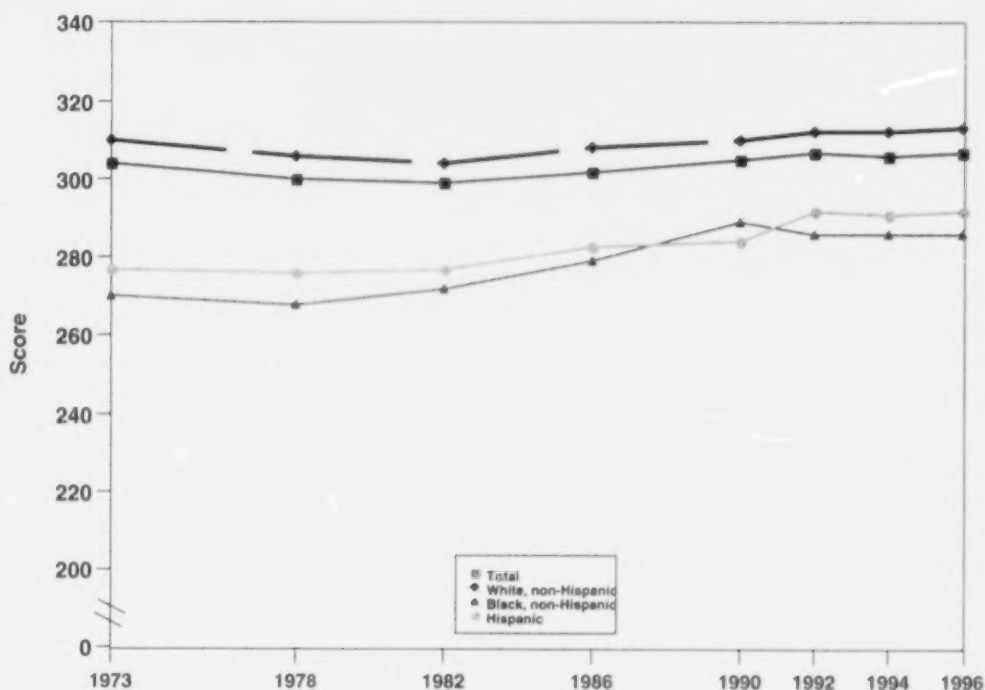
Level 350: Multi-step problem solving and algebra

Sources: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics; Data for 1973 appear in *NAEP 1992 Trends in Academic Progress*. Report No. 23-TR01. Washington, D.C.: National Center for Education Statistics.

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Figure EA 2.2

Average mathematics proficiency for children age 17 in the United States, by race and Hispanic origin:^a selected years, 1973 - 1996



^aPersons of Hispanic origin may be of any race.

Note: The mathematics proficiency scale ranges from 0 to 500.

Level 150: Simple arithmetic facts

Level 200: Beginning skills and understanding

Level 250: Numerical operations and beginning problem solving

Level 300: Moderately complex procedures and reasoning

Level 350: Multi-step problem solving and algebra

Sources: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics; Data for 1973 appear in *NAEP 1992 Trends in Academic Progress*. Report No. 23-TR01. Washington, D.C.: National Center for Education Statistics.

EA 2.3

SCIENCE PROFICIENCY FOR CHILDREN AGES 9, 13, AND 17

One of the National Education Goals for the year 2000, adopted by Congress, is to improve the relative standing of students in the United States in science achievement.²⁹ In a 1995 comparison of 8th graders in the United States with 8th graders in 40 other countries, the Third International Math and Science Study showed that students in the United States had significantly lower overall science proficiency scores than students in 9 countries, had similar scores to students in 16 countries, and had higher scores than students in 15 countries.³⁰

In order to present time trends in science proficiency levels, the National Assessment of Educational Progress (NAEP) reports five different proficiency levels, ranging from Level 150 (knows everyday science facts) to Level 350 (integrates specialized scientific information).³¹ The following tables report the average science proficiency scores of students in the three age groups between 1977 and 1996.

Trends in Science Proficiency Scores. Average science proficiency scores have increased among all age groups since 1977. Among 9-year-olds, average science proficiency scores increased between 1977 (220) and 1994 (231) and remained stable through 1996 (230) (see Table EA 2.3.A). Similarly, among 13-year-olds, average scores increased between 1977 (247) and 1994 (257) and remained constant through 1996 (256) (see Table EA 2.3.B). Among 17-year-olds, average science proficiency scores declined between 1977 (290) and 1982 (283), after which they increased to 296 in 1996. Thus, gains in science proficiency levels among 17-year-olds were not as great as gains for the other two age groups.

Differences by Gender. Average science proficiency scores have been consistently higher for males than females over time and for all age groups, though differences are smaller among 9-year-olds. Among 13-year-olds in 1996, boys scored on average 9 points higher than girls; among 17-year-olds the average difference was 8 points; and among 9-year-olds, males scored on average 4 points higher than females.

Differences by Race and Hispanic Origin.³² There are large differences in science proficiency scores by race and Hispanic origin among all age groups. For example, among 17-year-olds in 1996, whites had higher average science proficiency scores (307) than blacks (260) or Hispanics (269) (see Table EA 2.3.C); however, black 17-year-olds had especially high gains in achievement since 1977 (see Figure EA 2.3). Black 9-year-olds and 13-year-olds also showed high gains in science achievement over time.

Differences by Parents' Education Level. Average science proficiency levels vary dramatically by level of parents' education level;³³ for example, among 13-year-olds and 17-year-olds in 1996, the lowest average science proficiency scores were among teens whose parents did not have a high school education, while the highest scores were among teens who had a parent who had graduated from college. In 1996, the average science proficiency score among 13-year-old children of parents with a college education (266) was similar to the average score among 17-year-old children of parents without a high school degree (261) (see Tables EA 2.3.B and EA 2.3.C).

Differences by Type of School. Average science proficiency scores have been consistently higher among students attending nonpublic schools than among students attending public schools. This is true for every age group and every year reported (see Tables EA 2.3.A, EA 2.3.B, and EA 2.3.C).

²⁹National Education Goals Panel. 1997. *The National Education Goals Report: Building a Nation of Learners, 1997* (Goal 5, p. xvi). Washington, D.C.: U.S. Government Printing Office.

³⁰U.S. Department of Education, National Center for Education Statistics. 1997. *Pursuing Excellence: A Study of U.S. Eighth-Grade Mathematics and Science Teaching, Learning, Curriculum, and Achievement in International Context*. No. 97-198. Washington, D.C.: U.S. Government Printing Office.

³¹NAEP has regularly been conducting assessments of students in public and private schools in the United States in order to monitor trends in academic achievement in core curriculum areas since the 1970s. NAEP uses proficiency scales that range from 0 to 500. To give meaning to the results, students' performance is characterized at five levels along the proficiency scales (150, 200, 250, 300, 350).

³²Estimates for whites and blacks exclude Hispanics of those races.

³³Parents' education is not reported at age 9 because approximately one-third of these students did not know their parents' education level.

Table EA 2.3.A

Average science proficiency for children age 9 in the United States, by gender, race and Hispanic origin,^a and type of school: selected years, 1977-1996

	1977	1982	1986	1990	1992	1994	1996
Total	220	221	224	229	231	231	230
Gender							
Male	222	221	227	230	235	232	232
Female	218	221	221	227	227	230	228
Race and Hispanic origin^a							
White, non-Hispanic	230	229	232	238	239	240	239
Black, non-Hispanic	175	187	196	196	200	201	201
Hispanic	192	189	199	206	205	201	207
Type of school							
Public	218	220	223	228	229	230	229
Nonpublic	235	232	233	237	240	242	238

^aPersons of Hispanic origin may be of any race.

Note: The science proficiency scale ranges from 0 to 500:

Level 150: Knows everyday science facts

Level 200: Understands simple scientific principles

Level 250: Applies general scientific information

Level 300: Analyzes scientific procedures and data

Level 350: Integrates specialized scientific information

Source: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics.

Table EA 2.3.B

Average science proficiency for children age 13 in the United States, by gender, race and Hispanic origin,^a parents' education level, and type of school: selected years, 1977-1996

	1977	1982	1986	1990	1992	1994	1996
Total	247	250	251	255	258	257	256
Gender							
Male	251	256	256	259	260	259	261
Female	244	245	247	252	256	254	252
Race and Hispanic origin^a							
White, non-Hispanic	256	257	259	264	267	267	266
Black, non Hispanic	208	217	222	226	224	224	226
Hispanic	213	226	226	232	238	232	232
Parents' education level							
Less than high school	224	225	229	233	234	234	232
Graduated high school	245	243	245	247	246	247	248
Some education after high school	260	259	258	263	266	260	260
Graduated college	266	264	264	268	269	269	266
Type of school							
Public	245	249	251	254	257	255	255
Nonpublic	268	264	263	269	265	268	268

^aPersons of Hispanic origin may be of any race.

Note: The science proficiency scale ranges from 0 to 500:

Level 150: Knows everyday science facts

Level 200: Understands simple scientific principles

Level 250: Applies general scientific information

Level 300: Analyzes scientific procedures and data

Level 350: Integrates specialized scientific information

Source: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics.

Table EA 2.3.C

Average science proficiency for children age 17 in the United States, by gender, race and Hispanic origin,^a parents' education level, and type of school: selected years, 1977-1996

	1977	1982	1986	1990	1992	1994	1996
Total	290	283	289	290	294	294	296
Gender							
Male	297	292	295	296	299	300	300
Female	282	275	282	285	289	289	292
Race and Hispanic origin^a							
White, non-Hispanic	298	293	298	301	304	306	307
Black, non Hispanic	240	235	253	253	256	257	260
Hispanic	262	249	259	262	270	261	269
Parents' education level							
Less than high school	265	259	258	261	262	256	261
Graduated high school	284	275	277	276	280	279	282
Some education after high	296	290	295	297	296	295	297
Graduated college	309	300	304	306	308	311	308
Type of school							
Public	288	282	287	289	292	292	295
Nonpublic	308	292	321	308	312	310	303

^aPersons of Hispanic origin may be of any race.

Note: The science proficiency scale ranges from 0 to 500:

Level 150: Knows everyday science facts

Level 200: Understands simple scientific principles

Level 250: Applies general scientific information

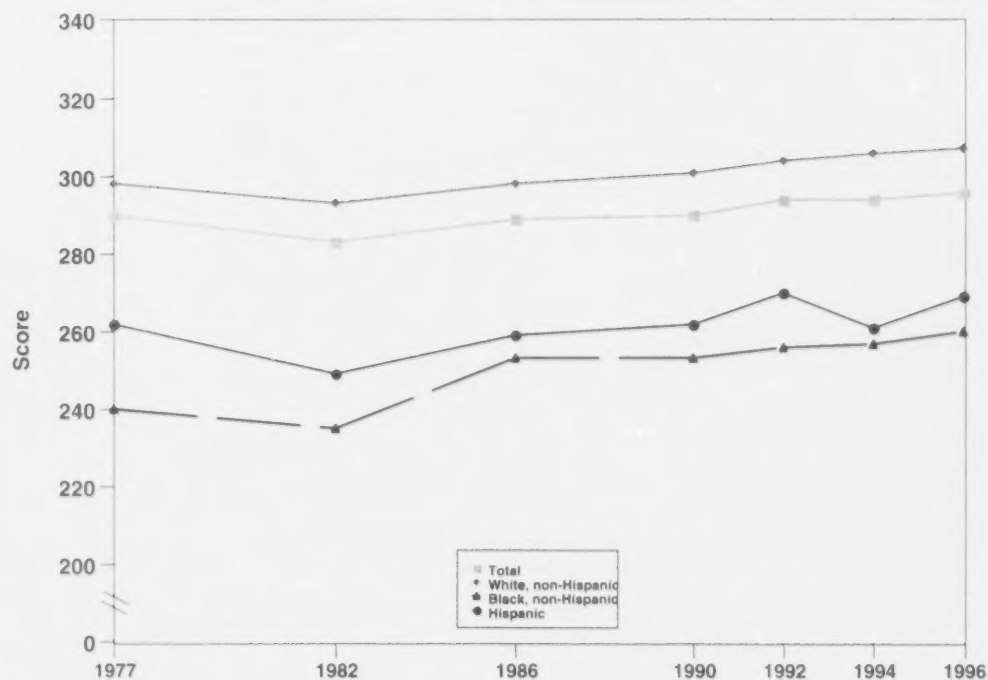
Level 300: Analyzes scientific procedures and data

Level 350: Integrates specialized scientific information

Source: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics.

Figure EA 2.3

Average science proficiency for children age 17 in the United States, by race and Hispanic origin:^a selected years, 1977 - 1996



^aPersons of Hispanic origin may be of any race.

Note: The science proficiency scale ranges from 0 to 500.

Level 150: Knows everyday science facts

Level 200: Understands simple scientific principles

Level 250: Applies general scientific information

Level 300: Analyzes scientific procedures and data

Level 350: Integrates specialized scientific information

Source: Campbell, J.R., Voelkl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress*. NCES 97-985. Washington, D.C.: National Center for Education Statistics.

EA 3.1

FAMILY-CHILD ENGAGEMENT IN LITERACY ACTIVITIES

Numerous studies have documented the importance of parental involvement in literacy activities with their children. One of the National Education Goals stresses the importance of family/child engagement in literacy activities, especially among children who are "at risk" of school failure, in order for all children in the United States to be able to start school ready to learn.³⁴

Table EA 3.1 presents three types of literacy activities that parents may engage in with their children. In 1996, a majority of 3- to 5-year-old children (57 percent) were read to by a parent or other family member every day, showing a slight increase from 1993 (53 percent). More than one-third of children (37 percent) visited a library at least once in the past month. About 55 percent of children were regularly told stories in 1996 (3 or more times a week), a substantial increase from 1991 levels (39 percent).

Differences by Race and Hispanic Origin.³⁵ There are substantial differences in all literacy activities by race and Hispanic origin; for example, in 1996, white children were more likely to be read to every day (64 percent) than black children (44 percent) or Hispanic children (39 percent). Similarly, white children (59 percent) were more likely to be told a story frequently than either black or Hispanic children (47 percent) (see Table EA 3.1). Also, more white children visited a library at least once in the past month in 1996 (41 percent) than either black children (31 percent) or Hispanic children (27 percent). These differences have been fairly stable over time.

Differences by Socioeconomic Status. Children in families living above the poverty threshold are much more likely to be engaged in literacy activities on a regular basis than are children who live in poverty; for example, in 1996, 61 percent of children in nonpoor families were read to every day by a parent or other family member, compared with 46 percent of children in poor families (see Figure EA 3.1). There are also substantial differences in literacy activities by mother's education level. For example, about one-fifth (19 percent) of children whose mothers did not have a high school diploma visited a library once or more in the past month, compared with more than half (56 percent) of children whose mothers were college graduates (see Table EA 3.1).

Differences by Family Structure. Children in two-parent families were more likely to participate in all three types of literacy activities than children who lived with one or no parent.

Differences by Mother's Employment Status. Children whose mothers were employed 35 hours or more per week were slightly less likely to engage in any of the three literacy activities than children whose mothers were either working part-time or not working.

³⁴National Education Goals Panel. 1997. *The National Education Goals Report: Building a Nation of Learners, 1997* (Goal 1, p. xiv). Washington, D.C.: U.S. Government Printing Office.

³⁵Estimates of whites and blacks exclude Hispanics of those races.

Table EA 3.1

Percentage of 3- through 5-year-olds^a in the United States who have participated in literacy activities with a family member, by child and family characteristics: 1991, 1993, 1995, and 1996

	Read to every day				Told a story at least three times a week				Visited a library at least once in the past month			
	1991	1993	1995	1996	1991	1993	1995	1996	1991	1993	1995	1996
Total	—	53	58	57	39	43	50	55	35	38	39	37
Gender												
Male	—	51	57	56	37	43	49	55	34	38	37	37
Female	—	54	59	57	41	43	51	56	36	38	41	36
Race and Hispanic origin ^b												
White, non-Hispanic	—	59	65	64	40	44	53	59	39	42	43	41
Black, non-Hispanic	—	39	43	44	34	39	42	47	25	29	32	31
Hispanic	—	37	38	39	38	38	42	47	23	26	27	27
Poverty status												
At or above poverty	—	56	62	61	39	44	53	58	38	42	43	41
Below poverty	—	44	48	46	38	40	44	49	26	29	30	28
Family structure ^c												
Two parents	—	55	61	61	39	44	52	59	38	41	43	40
One or no parent	—	46	49	46	37	41	46	47	23	30	30	29
Mother's education level ^d												
Less than high school	—	37	40	37	34	37	39	47	16	22	20	19
High school/GED	—	48	48	49	38	41	48	54	29	31	33	31
Vocational/technical or some college	—	57	64	62	41	45	53	55	40	44	42	41
College graduate	—	71	76	77	42	49	55	64	55	56	57	56
Mother's employment status ^e												
35 hours or more/week	—	52	55	54	37	43	49	53	30	34	35	32
Less than 35 hrs/week	—	56	63	59	40	45	53	56	41	47	46	39
Not in labor force	—	55	60	59	42	43	50	56	38	37	42	40

— = not available

^aEstimates are based on children who have yet to enter kindergarten.

^bPersons of Hispanic origin may be of any race.

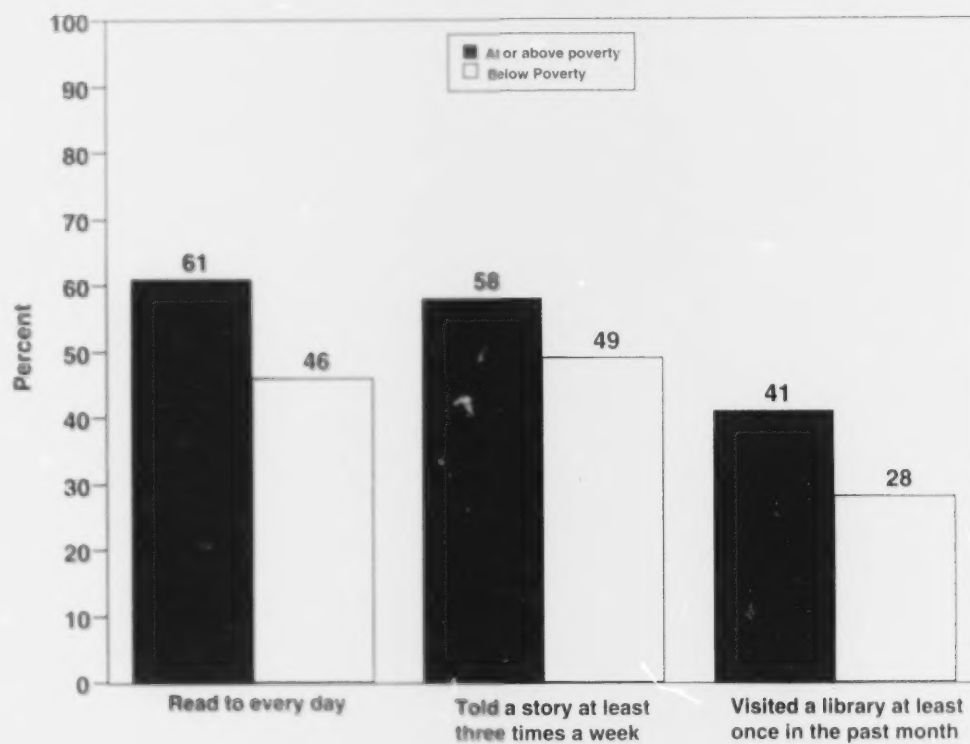
^cParents include any combination of a biological, adoptive, step, and foster mother and/or father. No parents in the household indicates that the child is living with non-parent guardians (e.g., grandparents).

^dChildren without mothers in the home are not included in estimates dealing with mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grandmother) who resides in the home with the child.

Sources: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, 1995, and 1996 National Household Education Survey.

Figure EA 3.1

Percentage of 3- through 5-year-olds in the United States who have participated in literacy activities with a family member, by poverty status: 1996



Sources: U.S. Department of Education, National Center for Education Statistics, 1991, 1993, 1995, and 1996 National Household Education Survey.

EA 3.2

READING HABITS OF CHILDREN AND YOUTH

Independent reading is one necessary aspect of literacy development. The National Assessment of Educational Progress (NAEP) has documented the association between students who read for fun in their free time and reading achievement. Students ages 9, 13, and 17 who read more frequently for fun had consistently higher average reading proficiency scores than those students who read less often.³⁶

Table EA 3.2 presents the percentage of students who read for fun on a daily basis for three age groups (9-, 13-, and 17-year-olds).

Differences by Age. In 1996, over half of 9-year-olds (54 percent) reported reading for fun on a daily basis, compared with about one-third of 13-year-olds (32 percent) and about one-quarter of 17-year-olds (23 percent) (see Table EA 3.2).

Differences by Gender. Among children ages 9 and 13, larger proportions of girls than boys reported frequent reading in their spare time. For example, more than half (57 percent) of 9-year-old girls read for fun on a daily basis, compared with 51 percent of 9-year-old boys in 1996. Among 17-year-olds, however, similar proportions of boys (22 percent) and girls (24 percent) reported reading on a daily basis in 1996 (see Figure EA 3.2).

Differences by Race and Hispanic Origin.³⁷ In 1996, the percentage of 9-, 13-, and 17-year-olds who reported reading for fun on a daily basis was similar for all racial/ethnic groups (see Table EA 3.2).

Differences by Parents' Education Level. In 1996, 13-year-olds whose parents had some post high school education were more likely to read for fun than students whose parents had no education beyond high school (see Table EA 3.2). A similar pattern is found among 17-year-olds; for example, in 1996, 28 percent of 17-year-olds whose parents had graduated from college read for fun on a daily basis. In contrast, 18 percent of 17-year-olds whose parents had graduated from high school (but had no education beyond that) and 14 percent whose parents had not finished high school reported reading for fun on a daily basis (see Table EA 3.2).

Differences by Type of School. Larger percentages of 13- and 17-year-olds who attended nonpublic schools read for fun on a daily basis than did their counterparts in public schools (see Table EA 3.2). Among 9-year-olds, a larger percentage of public school students reported reading for fun in 1992 and 1994, but this pattern reversed in 1996 (see Table EA 3.2).

³⁶Campbell, J.R., Voekl, K.E., and Donahue, P.L. 1997. *NAEP 1996 Trends in Academic Progress* (p. 141). NCES 97-985. Washington, D.C.: National Center for Education Statistics.

³⁷Estimates for whites and blacks exclude Hispanics of those races.

Table EA 3.2

Percentage of students ages 9, 13, and 17 in the United States who read for fun on a daily basis, by gender, race and Hispanic origin, parents' education level, and type of school: 1992, 1994, and 1996

	Age 9			Age 13			Age 17		
	1992	1994	1996	1992	1994	1996	1992	1994	1996
Total	56	58	54	37	32	32	27	30	23
Gender									
Male	48	49	51	30	25	27	23	29	22
Female	64	66	57	44	39	38	30	30	24
Race and Hispanic origin^a									
White, non-Hispanic	57	58	54	37	38	33	29	34	24
Black, non-Hispanic	54	58	51	35	18	29	14	16	21
Hispanic	54	58	56	44	15	28	25	17	21
Parents' education level									
Less than high school	—	—	—	16	24	29	23	15	14
Graduated high school	—	—	—	33	28	28	16	25	18
Some education after high school	—	—	—	37	40	41	28	30	22
Graduated college	—	—	—	44	37	34	35	36	28
Type of school									
Public	57	57	54	36	31	33	26	29	21
Nonpublic	52	54	61	49	40	36	44	46	28

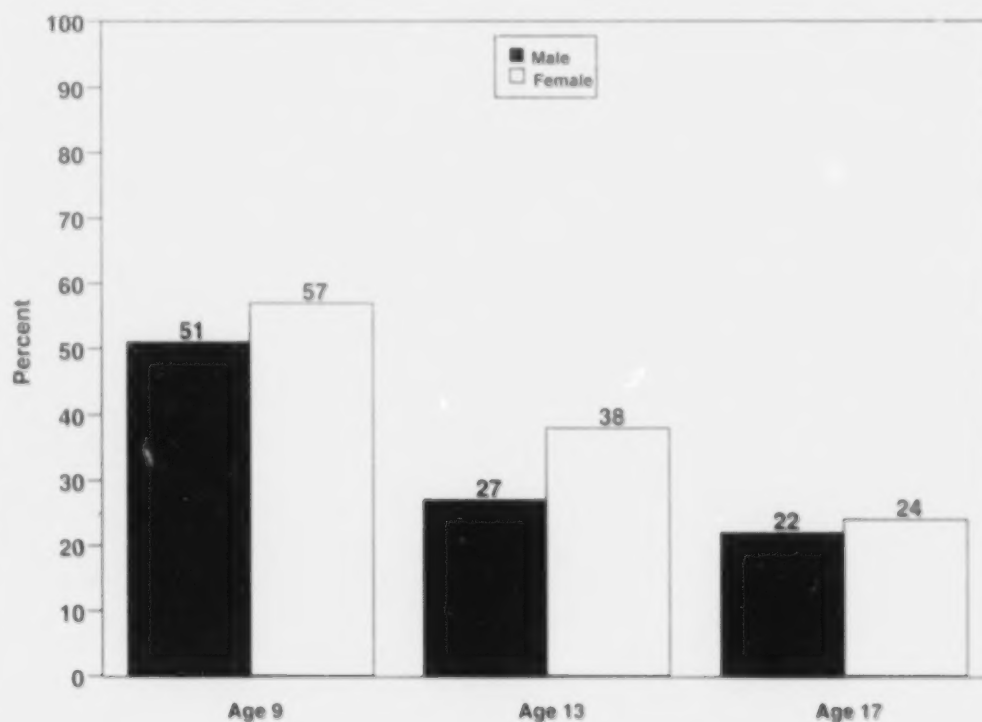
— = not available; sample size is insufficient to permit a reliable estimate.

^aPersons of Hispanic origin may be of any race.

Sources: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, and 1996 Long-Term Trends, Reading Assessment, unpublished data.

Figure EA 3.2

Percentage of students ages 9, 13, and 17 in the United States who read for fun on a daily basis, by gender: 1996



Sources: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, and 1996 Long-Term Trends, Reading Assessment, unpublished data.

EA 3.3

PARENTAL INVOLVEMENT IN CHILD'S SCHOOL

Many educators consider parental involvement in school activities to have a beneficial effect on children's school performance. They associate higher levels of parental involvement with greater monitoring of school and classroom activities, a closer coordination of teacher and parent efforts, greater teacher attention to the child, and earlier identification of problems that might inhibit learning.³⁸ Indeed, in two-parent families, parental involvement of both mothers and fathers in their child's school is significantly associated with an increased likelihood of first through 12th grade children earning mostly A's, and with a reduced likelihood that these children will ever repeat a grade.³⁹

Differences by Children's Grade Level. Figure EA 3.3 presents national estimates for 1996 on the degree of parental school participation among parents of children in grades 3 through 5, 6 through 8, and 9 through 12. Possible activities include 1) attending general school meetings (e.g., a PTA meeting or back-to-school night), 2) going to a regularly scheduled parent/teacher conference, 3) attending a school or class event such as a play or sports event, and 4) volunteering at the school or serving on a school committee.⁴⁰ As the figure indicates, the level of parental involvement in school activities decreases substantially as children get older.

- Thirty-nine percent of children in grades 3 through 5 had parents who were classified as highly involved in their children's schools, meaning that they had been involved in three or more types of activities described above during the school year.
- Children in grades 6 through 8 and 9 through 12 had parents with substantially lower involvement levels, with 24 and 22 percent, respectively, classified as highly involved.
- Nearly one-half (48 percent) of children in grades 9 through 12 had parents who were classified as having a low level of involvement, defined as having participated in one or no school activities.

Differences by Race and Hispanic Origin.⁴¹ Parents of white children were more likely than parents of black or Hispanic children to be highly involved in their children's schools at each grade level (see Table EA 3.3.A).

Differences by Socioeconomic Status. Children living in nonpoor households were much more likely to have highly involved parents than children living in poor households, for all grade levels. Children whose mothers had higher levels of education had more highly involved parents than children whose mothers had lower education levels, at all grades (see Table EA 3.3.A).

Differences by Family Structure. Children in two-parent families were more likely to have parents who were highly involved than children in families with one or no parent. For example, among students in grades 3 through 5, 43 percent of children with two parents had parents who were highly involved in their schools, compared with 29 percent of children with one or no parent (see Table EA 3.3.A); however, mothers and fathers who head single-parent families have similar school involvement patterns to those of mothers in two-parent families; fathers in two-parent families are less likely to be highly involved in their children's schools (see Table EA 3.3.B). For example, in 1996, about half of students in grades 6 through 8 had highly involved mothers (51 percent of mothers in two-parent families, 45 percent of mothers in single-parent families); similarly, 53 percent of students in grades 6 through 8 who were being raised by a single father had a highly involved parent. In comparison, only one-quarter (25 percent) of sixth- through eighth-graders in two-parent families had a highly involved father (see Table EA 3.3.B).

³⁸Zill, N., and Nord, C.W. 1994. *Running in Place: How American Families Are Faring in a Changing Economy and Individualistic Society*. Washington, D.C.: Child Trends, Inc.

³⁹Nord, C.W., Brimhall, D., and West, J. 1997. *Fathers' Involvement in Their Children's Schools*. NCES 98-091. Washington, D.C.: National Center for Education Statistics.

⁴⁰The level of involvement depends on the number of different activities reported by the parents, ranging from 0 or 1 (low involvement) to 2 (moderate involvement) to 3 or more activities (high involvement). Note that the number of times that the parent has been involved in each activity was not measured.

⁴¹Estimates for whites and blacks exclude Hispanics of those races.

Differences by Mother's Employment Status. Among children in grades 3 through 5 and 9 through 12, those whose mothers worked part-time (less than 35 hours per week) had more involved parents than children whose mothers either worked full-time (35 hours or more per week) or were not in the labor force; for instance, of children in grades 3 through 5, 56 percent of children whose mothers worked part-time were classified as highly involved, compared with 33 percent of children whose mothers worked full-time, and 36 percent of children whose mothers were not in the labor force (see Table EA 3.3.A).

Table EA 3.3.A

Percentage of children in the United States whose parents are involved in their schools, by level of involvement,^a grade, and child and family characteristics: 1996

	Low Involvement			Moderate Involvement			High Involvement		
	Grades 3 - 5	Grades 6 - 8	Grades 9 - 12	Grades 3 - 5	Grades 6 - 8	Grades 9 - 12	Grades 3 - 5	Grades 6 - 8	Grades 9 - 12
Total	26	37	48	36	39	31	39	24	22
Gender									
Male	27	40	50	35	38	29	38	22	22
Female	24	34	46	36	39	33	40	27	22
Race and Hispanic origin^b									
White non-Hispanic	21	31	43	36	41	32	44	28	25
Black non-Hispanic	37	52	60	36	31	27	27	17	14
Hispanic	36	49	61	36	36	26	29	16	14
Poverty status									
At or above poverty	21	31	44	35	41	31	44	28	25
Below poverty	39	55	64	37	31	27	24	14	10
Family structure^c									
Two parents	22	32	43	35	40	32	43	28	25
One or no parent	35	47	59	36	36	27	29	17	13
Mother's education level^d									
Less than high school	52	64	74	32	29	21	16	7	6
High school/GED	29	43	54	38	37	28	34	20	17
Vocational/technical or some college	21	30	43	36	42	34	43	28	23
College graduate	11	19	27	33	42	36	56	49	37
Mother's employment status^e									
35 hours or more/week	28	37	46	39	40	24	33	31	23
Less than 35 hrs/week	16	30	42	28	37	34	56	31	27
Not in labor force	29	42	54	35	37	21	36	30	16

^aLow involvement = involvement in 0 or 1 activity

Moderate involvement = involvement in 2 activities

High involvement = involvement in 3 or more activities

Possible activities include 1) attending general school meetings, 2) going to a regularly scheduled parent-teacher conference, 3) attending school or class event, and 4) volunteering in the school or serving on a school committee.

^bPersons of Hispanic origin may be of any race.

^cParents include any combination of a biological, adoptive, step, and foster mother and/or father. No parents in the household indicates that the child is living with non-parent guardians (e.g., grandparents).

^dChildren without mothers in the home are not included in estimates of mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grand-mother) who resides in the home with the child.

Source: U.S. Department of Education, National Center for Education Statistics, 1996 National Household Education Survey (NHES:96).

Table EA 3.3.B

Percentage of children in the United States whose parents are highly involved^a in their schools, by family structure, grade, and child and family characteristics: 1996

	Two Parents				Single Parent			
	Mother		Father		Mother		Father	
	Grades 6 - 8	Grades 9 - 12	Grades 6 - 8	Grades 9 - 12	Grades 6 - 8	Grades 9 - 12	Grades 6 - 8	Grades 9 - 12
Total	51	39	25	23	45	32	53	27
Gender								
Male	50	38	25	24	44	30	46	27
Female	52	40	25	21	45	35	65	27
Race and Hispanic origin^b								
White non-Hispanic	54	42	27	25	51	33	53	26
Black non-Hispanic	41	31	17	16	39	35	48	26
Hispanic	41	26	15	15	36	25	73	35
Mother's education level^c								
Less than high school	27	17	7	11	28	22	--	--
High school or equivalent	45	33	19	16	39	27	--	--
Vocational/technical or some college	56	41	28	24	54	39	--	--
Bachelor's degree	62	51	36	33	62	47	--	--
Graduate/professional school	67	54	38	40	59	42	--	--
Father's education level^d								
Less than high school	33	18	9	9	--	--	56	41
High school or equivalent	46	31	18	15	--	--	45	19
Vocational/technical or some college	55	42	30	22	--	--	55	33
Bachelor's degree	63	48	36	31	--	--	55	10
Graduate/professional school	59	54	34	42	--	--	64	50

-- = Not applicable.

^aHigh involvement = involvement in 3 or more activities.

Possible activities include 1) attending general school meetings, 2) going to a regularly scheduled parent-teacher conference, 3) attending school or class event, and 4) volunteering in the school or serving on a school committee.

^bPersons of Hispanic origin may be of any race.

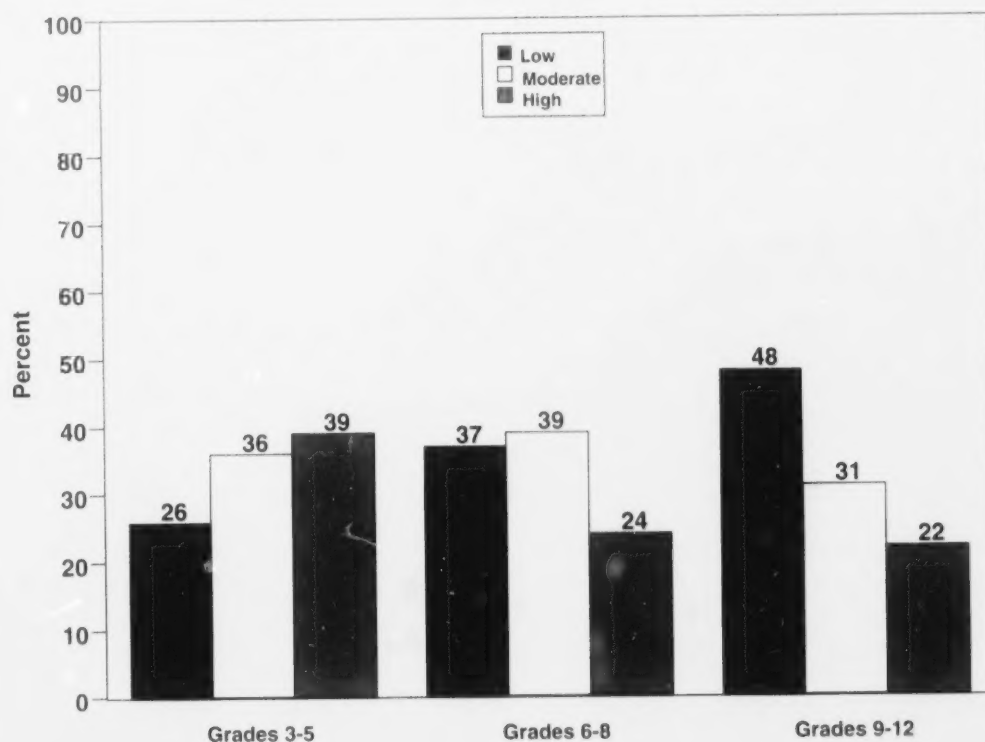
^cChildren without mothers in the home are not included in estimates of mother's education level. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grandmother) who resides in the home with the child.

^dChildren without fathers in the home are not included in estimates of father's education level. A father is defined as a biological father, adoptive father, stepfather, foster father, or male guardian (e.g., grandfather) who resides in the home with the child.

Source: U.S. Department of Education, National Center for Education Statistics, 1996 National Household Education Survey (NHES:96).

Figure EA 3.3

Percentage of parental involvement in child's school activities, in the United States: 1996



Note:

Low involvement = involvement in 0 or 1 activity

Moderate involvement = involvement in 2 activities

High involvement = involvement in 3 or more activities

Possible activities include 1) attending general school meetings, 2) going to a regularly scheduled parent-teacher conference, 3) attending school or class event, and 4) volunteering in the school or serving on a school committee.

Source: U.S. Department of Education, National Center for Education Statistics, 1996 National Household Education Survey (NHES:96).

EA 3.4

DIFFICULTY SPEAKING ENGLISH

Children who have difficulty speaking English may find that this difficulty limits their educational progress and their future employment prospects. They may also need special instruction in school to improve their English. Difficulty speaking English is most common among immigrant children and U.S. born children of immigrants. In the last three decades, the great majority of immigrants to the United States have come from Asia, Latin America, and the Caribbean.

In 1995, of the 6.7 million children ages 5 through 17 in the United States who spoke a language other than English at home, 2.4 million (36.6 percent) had difficulty speaking English. This represents a 3.9 percentage point increase from the proportion of similar children who had difficulty speaking English in 1979 (see Table EA 3.4). While the proportion of all children experiencing difficulty speaking English increased by 86 percent between 1979 and 1995, this group constituted only 5.2 percent of the total population of children ages 5 through 17 in 1995 (see Table EA 3.4).

Differences by Race and Hispanic Origin.⁴² Children of Hispanic or "other" ethnic origin are more likely than black or white children to have difficulty speaking English; for example, in 1995, 31 percent of all Hispanic children and 14 percent of children of "other" races (including Asians) had difficulty speaking English, compared to about 1 percent of black and white children. These differences are due in part to the fact that Hispanic and Asian children are more likely than whites or blacks to speak another language in the home (see Table EA 3.4).⁴³ One-third (33.3 percent) of non-Hispanic black children from homes where a language other than English was spoken had difficulty speaking English in 1995 (see Figure EA 3.4), an increase from 25.6 percent in 1979. Among Hispanic children from such homes, 41.9 percent had difficulty speaking English. Nineteen percent of non-Hispanic white children from homes where a language other than English was spoken had difficulty speaking English in 1995. The proportion was similarly low in 1992 and in 1979, but was substantially higher (33.0 percent) in 1989.

⁴² Estimates for whites and blacks exclude Hispanics of those races.

⁴³ See also *America's Children: Key National Indicators of Well-Being*. Federal Interagency Forum on Child and Family Statistics, 1997.

Table EA 3.4

Children ages 5 through 17 in the United States who speak a language other than English at home, and who are reported to have difficulty speaking English,^a by race and Hispanic origin:^b selected years, 1979-1995

	Children Who Speak Another Language at Home			Children Who Have Difficulty Speaking English		
	Total children ages 5-17 (in 1000's)	Number (1000's)	% of Total	Number (in 1000's)	% of Total	% speaking another language at home
1979						
Total	45,088	3,825	8.5	1,250	2.8	32.7
White, non-Hispanic	34,545	1,093	3.2	189	0.5	17.3
Black, non-Hispanic	6,640	86	1.3	22	0.3	25.6
Hispanic ^b	2,978	2,237	75.1	855	28.7	38.2
Other	925	408	44.1	183	19.8	44.9
1989						
Total	42,148	5,524	13.1	2,080	4.9	37.7
White, non-Hispanic	29,415	1,166	4.0	385	1.3	33.0
Black, non-Hispanic	6,478	178	2.7	56	0.9	31.5
Hispanic ^b	4,628	3,306	71.4	1,301	28.1	39.4
Other	1,627	873	53.7	339	20.8	38.8
1992						
Total	44,971	6,438	14.3	2,242	5.0	34.8
White, non-Hispanic	31,109	1,192	3.8	239	0.8	20.1
Black, non-Hispanic	6,953	302	4.3	101	1.5	33.4
Hispanic ^b	4,996	3,828	76.6	1,499	30.0	39.2
Other	1,913	1,116	58.3	403	21.1	36.1
1995						
Total	47,340	6,668	14.1	2,442	5.2	36.6
White, non-Hispanic	32,381	1,152	3.6	219	0.7	19.0
Black, non-Hispanic	7,219	219	3.0	73	1.0	33.3
Hispanic ^b	6,249	4,617	73.9	1,934	30.9	41.9
Other	1,491	680	45.6	214	14.4	31.5

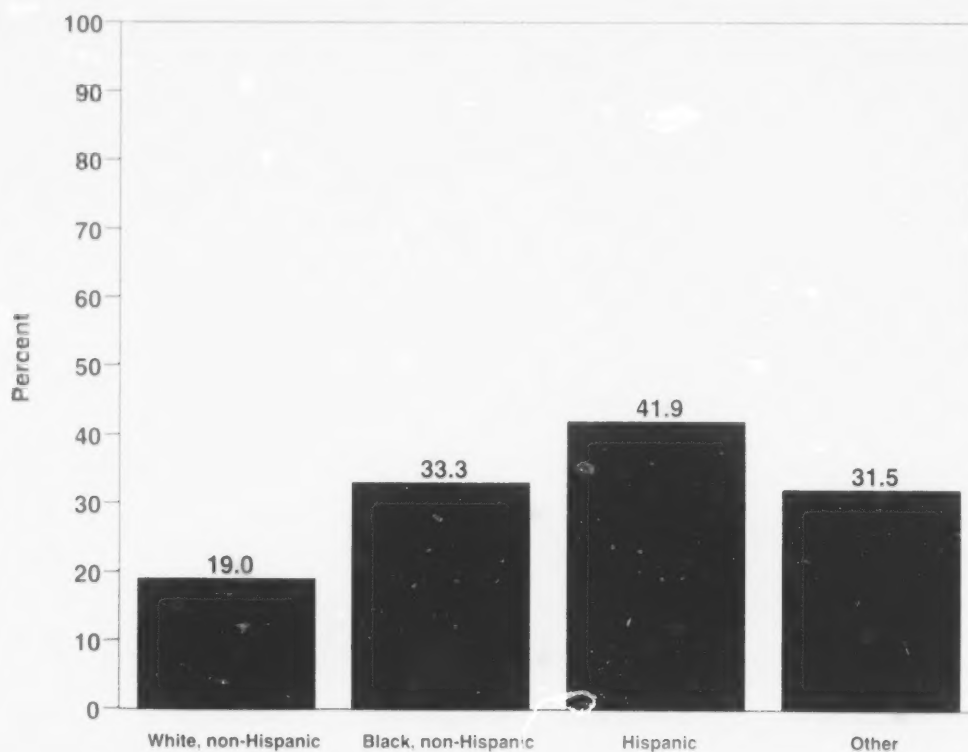
^aParents were asked if their child spoke a language other than English at home and how well the child could speak English. Categories used for reporting were "Very well," "Well," "Not well," and "Not at all." All children who were reported to speak below the level of "Very well" were considered to have difficulty speaking English.

^bPersons of Hispanic origin may be of any race.

Source: National Center for Education Statistics. Tabulations based on October 1992 and 1995 and November 1979 and 1989 Current Population Surveys, U.S. Bureau of the Census.

Figure EA 3.4

Percentage of children ages 5 through 17 in the United States who speak a language other than English at home, and who are reported to have difficulty speaking English,^a by race and Hispanic origin:^b 1995



^aParents were asked if their child spoke a language other than English at home and how well the child could speak English. Categories used for reporting were "Very well," "Well," "Not well," and "Not at all." All children who were reported to speak below the level of "Very well" were considered to have difficulty speaking English.

^bPersons of Hispanic origin may be of any race.

Source: See sources for Table EA 3.4.

Trends in the Well-Being of America's Children & Youth

PART 2

TABLE OF CONTENTS

THE WELL-BEING OF IMMIGRANT CHILDREN, NATIVE-BORN CHILDREN WITH IMMIGRANT PARENTS, AND NATIVE-BORN CHILDREN WITH NATIVE-BORN PARENTS

by Donald J. Hernandez and Katherine Darke
National Academy of Sciences

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EXECUTIVE SUMMARY

The children of today are the parents, workers, and citizens of America's future, and no group of American children is expanding more rapidly than those from immigrant families. During the seven years from 1990 to 1997, the number of children (ages 0-17) with at least one immigrant parent grew by 47 percent, compared to only 7 percent for children with native-born parents, and by 1997, 1 of every 5 children (19.8 percent or 14.1 million) was the child of an immigrant. Most growth in the number of children during the next three decades will occur through immigration and births to immigrants and their children. Mainly because the majority of children in immigrant families are of Hispanic or Asian origin, the proportion of children in the United States who are non-Hispanic white is projected to drop from 69 percent in 1990 to 51 percent in 2030. Meanwhile, as the baby-boom generation reaches retirement ages, the vast majority (about 75 percent) of the elderly will be non-Hispanic white. Thus, as the predominantly white, non-Hispanic baby-boom generation ages, it will depend increasingly for its economic support on the productivity, health, and civic participation of adults who grew up as first- or second-generation children in minority immigrant families (See Table 1).

Table 1.

Immigrant Generations of Children as Defined in this Chapter*

First-generation children:

- Children born in a foreign country

Second-generation children:

- Children born in the United States with at least one parent who was born in a foreign country

Third- and later-generation children:

- Children born in the United States to parents who were both born in the United States

Children in immigrant families:

- First-generation and second-generation children

*For definitions of additional variables see Technical Appendix or the source documents listed in table 2.

In this context, the Committee on the Health and Adjustment of Immigrant Children and Families was established by the National Research Council and the Institute of Medicine to assess the development of children from immigrant families and to identify the factors that affect their health and well-being. The committee found, as it began deliberating, that research necessary to consider many important questions did not exist. In response, the committee commissioned eleven new, detailed analyses of nationally or regionally representative surveys and censuses which constitute a large share of the national system for monitoring the health and well-being of the U.S. population (See Table 2). This essay presents key indicators and results from many of these eleven studies regarding the socioeconomic and family circumstances and the physical and mental health of children in immigrant families, compared to children in native-born families.

Table 2.

Primary Data Sources for: *Children of Immigrants: Health, Adjustment, and Public Assistance*

(Donald J. Hernandez, editor, Washington, D.C., National Academy Press, 1999)

Chapter 1

Socioeconomic and Demographic Risk Factors and Resources among Children in Immigrant and Native-Born Families: 1910, 1960, and 1990

by Donald J. Hernandez and Katherine Darke (National Academy of Sciences)

Data Set: Decennial Censuses of the Population and Housing, 1910, 1960, 1990

Chapter 2

Immigration and Infant Health: Birth Outcomes of Immigrant and Native Women

by Nancy S. Landale, R.S. Oropesa, Bridget Gorman

(The Pennsylvania State University)

Data Set: National Linked Birth/Infant Death Data Sets (1989-1991)

Chapter 3

The Health and Nutritional Status of Immigrant Hispanic Children: Analyses of the Hispanic Health and Nutrition Examination Survey

by Fernando S. Mendoza and Lori Beth Dixon (Stanford University)

Data Set: National Health and Nutrition Examination Survey (1996)

Chapter 4

The Health Status and Risk Behavior of Adolescents in Immigrant Families

by Kathleen Mullan Harris (University of North Carolina at Chapel Hill)

Data Set: National Longitudinal Survey of Adolescent Health (1995)

Chapter 5

Psychological Well-Being and Educational Achievement among Immigrant Youth

by Grace Kao (The University of Pennsylvania)

Data Set: National Educational Longitudinal Survey of 1988

Chapter 6

Passages to Adulthood: The Adaptation of Children of Immigrants in Southern California

by Ruben Rumbaut (Michigan State University)

Data Set: Children of Immigrants Longitudinal Survey (1992-1996)

Chapter 7

Educational Profile of 3 to 8 Year Old Children of Immigrants

by Christine Winquist Nord (Westat), and James A. Griffin (National Institute on Early Childhood Development and Education)

Data Set: National Education Longitudinal Survey (1996)

Chapter 8

Public Assistance Receipt of Mexican- and Cuban-American Children in Native and Immigrant Families

by Sandra Hofferth (University of Michigan)

Data Set: Panel Study of Income Dynamics (1990-1992)

Chapter 9

Public Assistance Receipt of Immigrant Children and Their Families: Evidence from the Survey of Income and Program Participation

by Peter Brandon (University of Massachusetts)

Data Set: Survey of Income and Program Participation (1986-1992)

Chapter 10

Access to Health Insurance and Health Care for Children in Immigrant Families

by E. Richard Brown, Roberta Wyn, Hongjian Yu, Abel Valenzuela, and Lianne Dong (University of California at Los Angeles)

Data Sets: Current Population Survey (1996) and National Health Interview Survey (1994)

Chapter 11

Children of Immigrant Farm Workers

by Richard Mines (U.S. Department of Labor)

Data Set: National Agricultural Workers Survey (1993-1995)

Poverty, low parental educational attainments, and living in a family with one parent absent or a large number of siblings has each been demonstrated, for children and youth generally, to result in negative health and other important outcomes. Overcrowded housing conditions can facilitate the transmission of communicable diseases such as tuberculosis, hepatitis A, and other enteric and respiratory infections.

First- and second-generation children experienced somewhat higher poverty rates, overall, than third- and later-generation children in the 1990 census (for income in 1989), but the differences are concentrated among first-generation children. Second-generation children were only slightly more likely to be poor (19 percent) than were third- and later-generation children (17 percent). In addition, first-generation children from most countries of origin and, to an even greater extent, second-generation children were less likely to live in a one-parent family in 1990 than were third- and later-generation non-Hispanic white children. The proportions of children whose parents have graduated from college and whose fathers are in the labor force are highly similar for first-, second-, and third- and later-generation children. At the other end of the spectrum, however, first- and second-generation children are substantially more likely than third- and later-generation children to have a father with no more than eight years of schooling and a father who does not work full-time, year-round.

These general patterns camouflage the enormous diversity in socioeconomic circumstances that characterizes first- and second-generation children from various countries of origin; for example, first- and second-generation children from more than two dozen countries in South America, Asia, Africa, the Middle East, and Europe are somewhat, to considerably, more likely than third- and later-generation non-Hispanic white children to have a father in the home who has graduated from college. Similarly, first- and second-generation children from about two dozen countries have poverty rates that are equal to or lower than the poverty rate for third- and later-generation non-Hispanic whites.

On the other hand, first- and second-generation children from 12 countries of origin that account for close to half of all children in immigrant families had poverty rates (over 25 percent) in the range experienced by third- and later-generation Hispanic and black children. The 12 countries from which these children or their parents have immigrated are the source of many officially recognized refugees (the former Soviet Union, Cambodia, Laos, Thailand, Vietnam), include three war-torn countries in Central America (El Salvador, Guatemala, and Nicaragua); or are major sources of both legal and illegal unskilled labor migrants (Mexico, Honduras, Haiti, and the Dominican Republic). In every case except the former Soviet Union, children with origins in these countries are likely to be classified as Hispanic, Asian, or black. The situation of children from these 12 countries is of particular concern in view of the risks of negative life outcomes that are associated with poverty generally.

Poverty within this group of 12 countries did not consistently show the associations with other socio-demographic factors that have been found repeatedly for children in third- and later-generation families. Although first- and second-generation children from these 12 countries (except the former Soviet Union) were very likely to have poorly educated parents and to live in overcrowded housing, they did not necessarily show high rates of living in a one-parent family or a family with many siblings. Moreover, children from most of these countries had quite high rates of father's labor force participation (exceptions were Laos, Cambodia, and Thailand), although their fathers did not necessarily work full-time, full-year. These children were also distinguished, however, by their particularly high rates of living in linguistically isolated households, of not speaking English very well, and of not being U.S. citizens.

Children with parent origins in Mexico account for about two-thirds of the first- and second-generation children from these 12 countries. Despite improvements across the generations, third- and later-generation Mexican-origin children are about 2.5 times more likely than their white non-Hispanic counterparts to live in poverty and to have parents who have not graduated from high school, and about four times more likely to live in overcrowded housing. The disadvantaged socioeconomic circumstances of third- and higher-generation Mexican-origin children suggests that ethnic stratification may, historically, have severely limited the resources and opportunities available to children in immigrant families from Mexico. Moreover, despite improvements among Mexican-origin children between the first and second generations in the risk of living in a one-parent family, the situation deteriorates substantially by the third and later generations, probably reflecting the role that economic insecurity plays in fostering divorce and out-of-marriage childbearing.

Many measures of physical health and risk behaviors that have been reported for first- and second-generation children and adolescents indicate that they are generally healthier than their third- and later-generation counterparts—a finding that is counterintuitive in light of the racial or ethnic minority status, overall lower socioeconomic status, and higher poverty rates that characterize many of the immigrant children and families. Evidence on this issue is patchy, however, focusing only on some immigrant groups and age groups and frequently relying on parental reports rather than direct medical examinations. Although the research that exists is quite consistent, the evidence also indicates that the relative health of immigrant children tends to decline with length of time in the United States and from one generation to the next.

Specifically, children born in the United States to immigrant mothers are less likely to have low birthweights and to die in the first year of life than are children of U.S.-born mothers from the same ethnic group, despite the generally poorer socioeconomic circumstances of the immigrant mothers for many specific countries of origin. Parents report that first- and second-generation children experience fewer acute and chronic health problems compared to third- and later-generation children. And, first- and second-generation adolescents report lower levels of neurological impairment, obesity, asthma, and health risk behaviors such as early sexual activity; use of cigarettes, alcohol, marijuana, or hard drugs; delinquency; and use of violence, compared to third- and later-generation children. Yet, the neonatal and adolescent health advantages of immigrants appear to deteriorate over time, raising the intriguing possibility that immigrant children and youth are somewhat protected, albeit temporarily, from many of the deleterious health consequences that typically accompany poverty, minority status, and other indicators of disadvantage in the United States.

Despite this generally positive portrait, not all conclusions that can be drawn about the health of immigrant children are favorable. First- and second-generation children with parents from Mexico, for example, are more likely to be reported by parents as being in poor general health, having teeth in only fair to poor condition, and especially for those in the first generation aged 12 to 16, to have vision problems. Exposure to pesticides is an additional health risk for children of migrant farm workers.

First- and second-generation adolescents appear as likely as their third- and later-generation counterparts to experience feelings of psychological well-being and positive self-concept and to avoid serious psychological distress that can, in the extreme, contribute to adolescent suicide rates. These positive signs of adjustment are maintained despite perceptions among first- and second-generation adolescents—particularly those who are of Hispanic and Asian origin—that they have less control over their own lives and are less popular with classmates, compared to their third- and later-generation peers. In contrast to measures of physical health, these measures of mental health actually appear to improve from the first to the second generation. By the third generation, however, there is evidence again of deterioration.

First- and second-generation adolescents also, on average, perform just as well if not better in school than their third- and later-generation peers, achieving somewhat higher middle school grade point averages and math test scores than do third- and later-generation children. Reading test scores among the first generation are, however, lower than for later generations probably as a result of their poorer English proficiency. Not all immigrant children manage to perform well in school, however; for example, first- and second-generation Chinese adolescents tend to have higher grades and math test scores than do third- and later-generation adolescents who are either Chinese or non-Hispanic white. But first-, second-, and third- and later-generation with origins in Mexico have grades and math test scores that are similar to each other and lower than among third- and later-generation non-Hispanic white adolescents. Most of the lower grades and math test scores of Mexican-origin adolescents of all generations, compared to third- and later-generation non-Hispanic whites, are accounted for by lower parental educational attainments and family income.

Higher educational attainments are important for obtaining well-paid jobs during adulthood. By age 17, the proportions not enrolled in school in 1990 were similar for second-generation adolescents and third- and later-generation non-Hispanic whites, but one-third to one-half higher for third- and later-generation black and Hispanic adolescents. First-generation adolescents were more than twice as likely as the second generation to not be enrolled in school (20 percent), but nearly all of the difference is accounted

for by the very high non-enrollment rates for foreign-born adolescents from Mexico and eight other impoverished or war-torn countries of origin who experience very high U.S. child poverty rates. Many of these youth probably immigrated recently, and may have educational and related needs quite different from children who immigrate at younger ages, and from adolescents born in the U.S.

INTRODUCTION

The parents, workers, and citizens of America's future are the children of today, and no group of American children is expanding more rapidly than those from immigrant families. Between 1990 and 1997, the number of first- and second-generation children grew by 47 percent, compared to only 7 percent for third- and later-generation children, and more than 1 of every 5 children (19.8 percent or 14.1 million) in 1997 was the child of an immigrant (Hernandez and Charney, 1998). During the next three decades, immigration and births to immigrants and their children will account for most growth in the number of children. The proportion of children in the United States who are non-Hispanic white is projected to drop from 69 percent in 1990 to only 51 percent in 2030 (Day, 1996), mainly because the majority of children in immigrant families are of Hispanic or Asian origin. Meanwhile, as the baby-boom generation reaches retirement ages, the vast majority (about 75 percent) of the elderly will be non-Hispanic white; thus, as the predominantly white, non-Hispanic baby-boom generation ages, it will depend increasingly for its economic support on the productivity, health, and civic participation of adults who grew up as children in minority immigrant families.

In this context, the Committee on the Health and Adjustment of Immigrant Children and Families was established by the National Research Council and the Institute of Medicine to assess the development of children and youth in immigrant families, both citizen and noncitizen children, and to identify the factors that affect the health and well-being of these children and youth (Hernandez and Charney, 1998). At the beginning of its work, the committee found itself without the research or data necessary to consider many questions related to its charge. In response, the committee commissioned eleven new, detailed analyses of 12 nationally or regionally representative surveys and censuses which constitute a large share of the national system for monitoring the health and the family and socioeconomic well-being of the U.S. population (Hernandez, 1999).

Publicly available computer files for six of these data sets are organized with adults or households as the primary unit of analysis (Decennial Census of Population and Housing, Current Population Survey, Survey of Income and Program Participation, National Health Interview Survey, National Agricultural Workers Survey, and Panel Study of Income Dynamics); thus, the creation of data sets that were essential in order to develop estimates for children, that is, computer files organized with children as the unit of analysis, involved data management activities that were not only innovative but which also required enormous effort. Equally innovative is that all eleven of these new studies distinguish, to the extent possible, first-, second-, and third- and later-generation children, usually using variables not explicitly intended for this purpose (for the committee's recommendations for new data collection needed to improve future studies, see Hernandez and Charney (1998)).

Because, prior to these new studies, few of these data sources had been used to assess the circumstances of children in immigrant families, the new studies enormously expand our knowledge about the physical and mental health status and risk behaviors, the educational experience and outcomes, the socioeconomic and demographic circumstances, and the participation in public programs of first- and second-generation children, compared to third- and later-generation children. This essay presents key indicators and results from many of these eleven studies (See Table 23 for list of studies and data sources).

The indicators presented here distinguish, insofar as possible, among children (ages 0-17) who are first generation (foreign-born), second generation (native-born in the United States with at least one foreign-born parent), and third or later generation (native-born with native-born parents). To reflect the sometimes great differences between immigrants that are associated with the social, economic, and cultural conditions of their countries of origin, indicators presented here also distinguish, insofar as possible, among children in immigrant families according to their country or region of origin. Because life chances differ greatly according to race and ethnicity in the United States, and because the racial and ethnic composition of immigrants has shifted markedly during recent decades toward a larger representation of Hispanic and nonwhite minorities, this essay often compares the situation of immigrants and natives who are white, black, Hispanic, or Asian. Limitations of available data for these purposes are discussed in the technical appendix.

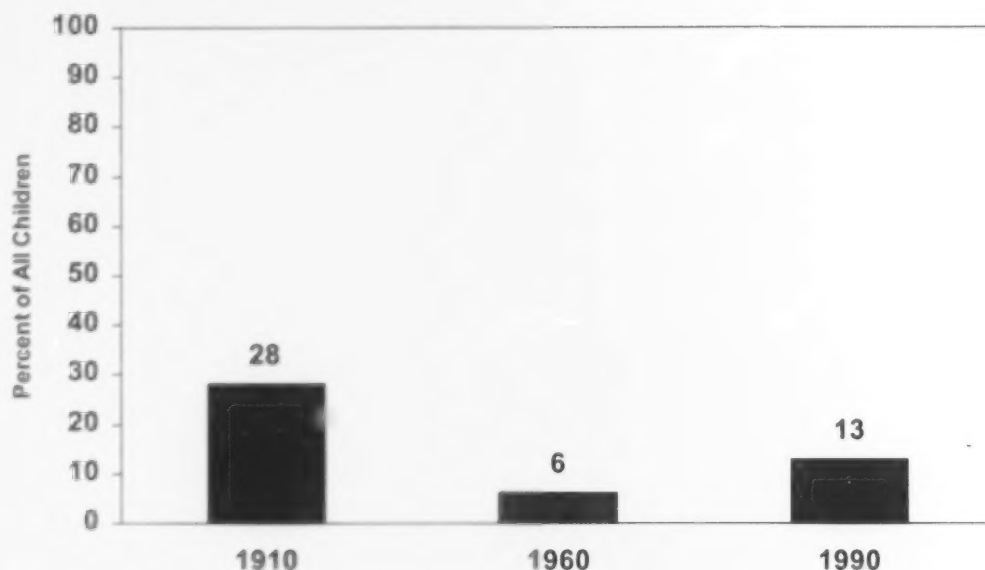
NUMBER, COUNTRIES OF ORIGIN, AND GENERATION

Immigrants from various countries of origin may differ enormously in their socioeconomic and demographic characteristics, their language and culture, and their racial and ethnic composition. The number and countries of origin of children in immigrant families have changed greatly during the twentieth century (Hernandez and Darke, 1999).

Children in immigrant families living with at least one parent dropped from 9.3 million in 1910 to 3.7 million in 1960, and then jumped to 8.2 million in 1990, nearly returning to the level of 1910. But the total population of children was rising as well; hence, children in immigrant families as a proportion of all children plummeted from 28 percent in 1910 to only 6 percent in 1960, and the subsequent rise to 13 percent in 1990 represented only one-half the level of 1910 (Figure 1).

Figure 1

Percent of Children in Immigrant Families: 1910, 1960, and 1990



Note: See Technical Appendix for description of variables.

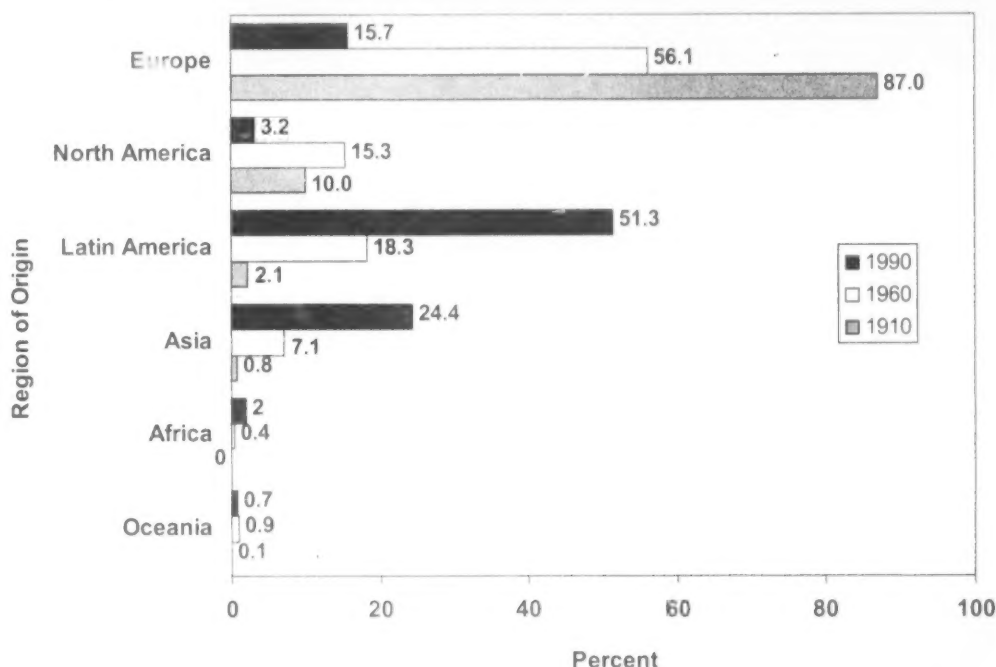
Source: Hernandez and Darke, 1999.

Focusing on regions and countries of origin (Figure 2), among first- and second-generation children in 1910, most had origins in Europe (87 percent) or Canada (10 percent). The Northwest European countries of Germany, Scandinavia, Ireland, and the United Kingdom accounted for the largest proportions, at 20, 11, 10, and 9 percent, respectively. Southeast European countries of origin for many children included Italy, Poland, and Austria, at 9, 7, and 6 percent, respectively. Russia and Hungary each accounted for an additional 3 percent. Immigrants speaking Yiddish or Jewish have been a focus of recent research on immigrants using the 1910 census (Watkins, 1994). Adopting the same approach here, children identified as Jewish, based on their own or their parents' mother tongue, accounted for 7 percent of children in immigrant families in 1910, most in families arriving from Russia.

At the turn of the century, perceived differences in culture and race separating Southern and Eastern European immigrants from native-born Americans were viewed as enormous. In the massive government study of the time, the Joint U.S. Immigration Commission (popularly known as the Dillingham

Figure 2

Percent of Children in Immigrant Families from Various Regions of Origin: 1910, 1960, 1990



Note: See Technical Appendix for description of variables.

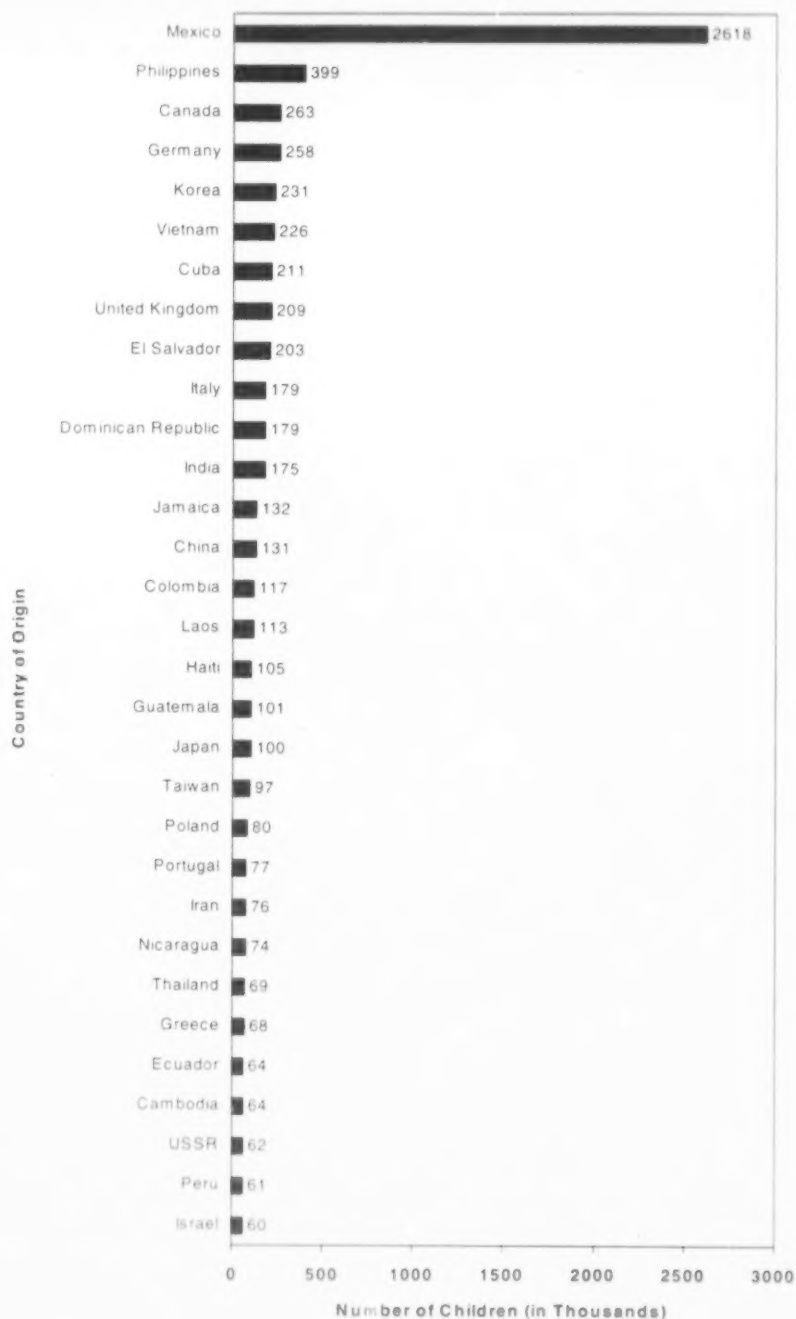
Source: Calculated from 1910 Census and 1960 Census IPUMS files, and 1990 Census 5% PUMS file.

Commission) drew sharp distinctions between the "old" Northern and Western European immigrants and the "new" Southern and Eastern European immigrants (U.S. Immigration Commission, 1911). Anthropologists, scientists, and policy makers of the era shared the public sentiment that the new immigrants were likely to dilute both the racial and cultural purity of native-born Americans with a mainly Northwestern European heritage (Ross, 1914; Stoddard, 1920). Despite these concerns, however, a comprehensive assessment using 1980 census data found that, while white ethnic groups maintain some distinctive patterns, differences on many measures have disappeared, including fertility rates and socioeconomic measures such as educational attainments. The high degree of assimilation among white ethnic groups also is reflected in extensive intermarriage across ethnic lines (Lieberson and Waters, 1988: 250).

By 1960, children with European or Canadian origins accounted for a substantially smaller proportion of first- and second-generation children than they did in 1910, only 71 percent, at 56 and 15 percent, respectively. The largest numbers from Europe had origins in Germany, the United Kingdom, and Italy, at 10 or 11 percent each, followed by Poland, Scandinavia, Ireland, and the former Soviet Union, at 3 percent each. By 1990, only 19 percent of first- and second-generation children had origins in Europe or Canada, with only Canada, the United Kingdom, and the former Soviet Union accounting for as much as 2 or 3 percent each. Figure 3 presents estimates of the number of first- and second-generation children for the 62 countries of origin which each accounted for at least 15,000 children in immigrant families in 1990.

Figure 3 (Part 1)

Number of First- and Second- Generation Children from 62 Countries of Origin (in thousands): 1990



Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 3 (Part 2)

Number of First- and Second- Generation Children from 62 Countries of Origin (in thousands): 1990



Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Corresponding increases have occurred since 1910 among sending countries in Latin America and Asia. The proportion of first- and second-generation children with origins in Central or South America or the Caribbean jumped from only 2 percent in 1910 to 18 percent in 1960, and then to 55 percent in 1990, with most having origins in Mexico, at 2, 13, and 33 percent, respectively, as of these years. Meanwhile, the proportion from Asia jumped from 1 to 7 percent between 1910 and 1960, and then to 25 percent in 1990. The Asian countries accounting for the largest number of first- and second-generation children as of 1990 were, in order of the number of children, (1) Philippines, (2) Korea, (3) Vietnam, (4) India, (5) China, (6) Laos, (7) Japan, (8) Taiwan, (9) Thailand, and (10) Cambodia, but each accounted for only 2 to 5 percent of first- and second-generation children (Figure 3).

Since the beginning of the twentieth century, then, the countries of origin of first- and second-generation children have become increasingly diverse, as reflected in the shrinking number of countries which account, individually, for substantial proportions of children, and in the broadening global distribution of these countries, with increasing numbers from Latin America and Asia. The exception to this generalization is that one country, Mexico, has rapidly increased in importance as a source of first- and second-generation children, accounting for one-third of all such children in 1990. In view of their large share, first- and second-generation children from Mexico receive special attention in this essay. Associated with historical shifts in country of origin are rising proportions of first- and second-generation children who are classified according to the racial and ethnic stratification system of the United States as minorities who are Hispanic or Asian. The diversity in countries of origin as of 1990 is also suggested by the fact that 34 countries each contributed at least 50,000 first- or second-generation children.

Throughout the century, the vast majority of children in immigrant families have been second-generation children born in the U.S. with at least one foreign-born parent. In 1910, the second generation accounted for 89 percent of all children in immigrant families, and this declined to 83 percent in 1960, and still further to 77 percent in 1990. Hence, only one-fourth of children in immigrant families in 1990 were themselves foreign-born; three-fourths were U.S. citizens by virtue of birth in this country.

SOCIOECONOMIC AND DEMOGRAPHIC RISK FACTORS AMONG CHILDREN

The extent to which the risks and needs of children in immigrant families differ from their third- and later-generation peers depends, at least in part, on the extent to which they are similar or different in family circumstances that have been found to influence outcomes among children generally. These circumstances include experience with poverty, parental educational attainments and paid work by various family members, living in a two-parent or one-parent family, living with a small or large number of siblings, and exposure to overcrowded housing conditions (Hernandez and Darke, 1998).

One of the best-documented relationships in epidemiology and child development is that social and economic inequality has negative consequences for health and other important outcomes for persons of low socioeconomic status, that is, persons experiencing poverty, job insecurity and unemployment, and limited educational attainments (U.S. Department of Health and Human Services, 1981; Starfield, 1982; Hill and Duncan, 1987; Newacheck and Starfield, 1988; Starfield, 1991; Starfield, 1992; Montgomery and Carter-Pokras, 1993; Newacheck, 1994; Newacheck and Jamison, 1994; Montgomery, Kiely, and Pappas, 1996; Wilkinson, 1996; Duncan and Brooks-Gunn, 1997). Children living in poverty have comparatively limited access to economic resources required to purchase necessary goods and services, such as housing, food, clothing, and health care.

Parental educational attainments are important because they influence current parental values in socializing children, as well as parental occupation and income, but also because they influence the levels of education and income that children achieve when they, in turn, become adults (Blau and Duncan, 1967; Kohn, 1969; Sewell and Hauser, 1975; Featherman and Hauser, 1978; Sewell, Hauser, and Wolf, 1980; Kohn and Schooler, 1983; Alwin, 1984); thus, children whose parents have completed relatively few years of school are disadvantaged, compared to children with more highly educated parents, because their parents are less likely to have paid jobs which provide access to health insurance and to income

required to buy important goods and services, and because these children are less likely to complete high school or college and, hence, are less likely to achieve economic success in adulthood.

Because paid work by parents is the primary source of family income for most children, the number of parents who work for pay and whether they work part-time or full-time are key determinants of whether children live in poverty or in middle-class comfort or luxury. Father's paid work has been the primary factor determining trends since the Great Depression in child poverty, but mother's paid employment has become increasingly important (Hernandez, 1993; 1997).

Children who live with only one parent are at risk for a variety of current and long-term negative life outcomes because children with two parents in the home have greater access, potentially, to parents as personal care givers and as economic providers than do children living with one parent, and because children in one-parent families often experience greater personal or parental stress (Blau and Duncan, 1967; Kohn, 1969; Sewell and Hauser, 1975; Featherman and Hauser, 1978; Heatherington, Cox, and Cox, 1978; Sewell et al., 1980; Wallerstein and Kelly, 1980; Furstenberg, Nord, Peterson, and Zill, 1983; Kohn and Schooler, 1983; Alwin, 1984; Hernandez, 1986; Kominski, 1987; Wallerstein, Corbin, and Lewis, 1988; Wallerstein and Kelly, 1989; Cherlin, Furstenberg, Chase-Lansdale, Kiernan, Robins, Morrison and Teitler, 1991; McLanahan and Sandefur, 1994).

Many children in one-parent families live in poverty, partly because father's incomes may not be available in the home, and partly because low socioeconomic status strongly influences both family disruption and out-of-wedlock childbearing. Poverty has major effects on child outcomes that are independent of family structure; but children living with only one parent are also at risk of negative life outcomes beyond the effect of poverty (Elder, 1974; Elder, Conger, Foster, and Ardel, 1992; Conger, Elder, Lorenz, Conger, Simons, Whitbeck, Huck and Melby; Hernandez, 1993; Conger and Elder, 1994; McLanahan and Sandefur, 1994).

Most children live not only with one or two parents but also with one or more brothers or sisters who are potential sources of life-long loving companionship, but who also are potential competitors for the scarce time and economic resources parents can devote to their children. Although research has found the number of siblings to have little effect on a child's psychological well-being later during adulthood, children in large families with five or more siblings do tend to complete fewer years of schooling than children from smaller families, and they are, therefore, less likely to enter high-status occupations with high incomes when they reach adulthood (Featherman and Hauser, 1978; Blake, 1981, 1985, 1987, 1989; Glenn and Hoppe, 1982; Hernandez, 1986).

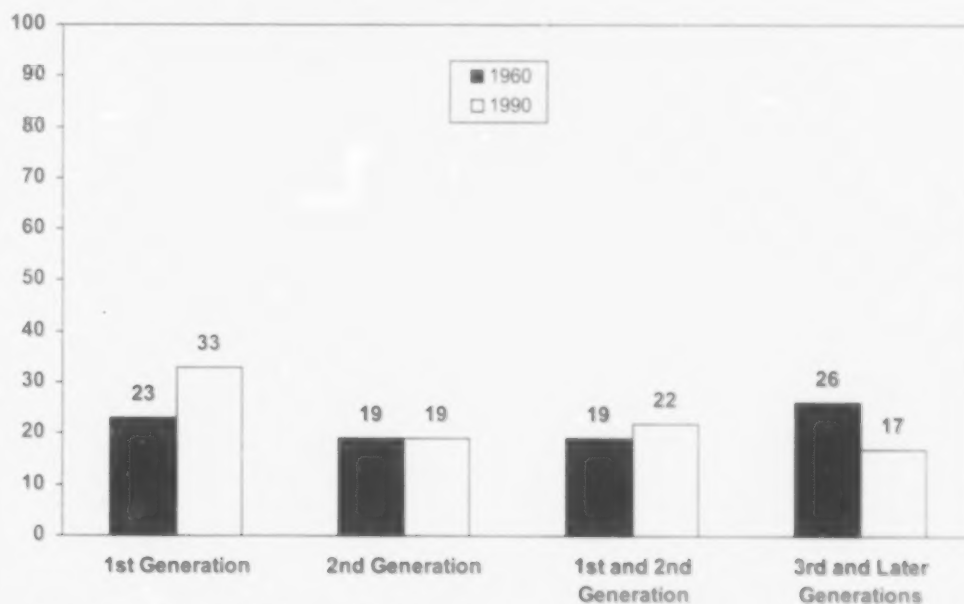
In addition, low family income can lead to overcrowded housing conditions which, in turn, can facilitate the transmission of communicable diseases such as tuberculosis, hepatitis A, and other enteric and respiratory infections (Hernandez and Charney, 1998).

POVERTY AND INCOME INEQUALITY

First- and second-generation children were somewhat more likely to live in families with incomes below the official poverty threshold in the 1990 census (income during 1989) than were third- and later-generation children, at 22 and 17 percent, respectively (Figure 4). Most of the difference was accounted for by the high poverty rate among the first generation (33 percent), while the second generation was only slightly more likely (19 percent) to be poor than were third- and later-generation children (17 percent). In the 1960 census (for income in 1959), the opposite was true, overall, because first- and second-generation children were less likely to be poor than third- and later-generation children (19 versus 26 percent), although, as in 1989, the risk was greater for the first than for the second generation in 1959 (23 versus 19 percent).

Figure 4

Percent in Official Poverty for First-, Second, and Third-and-Later-Generation Children: 1960 and 1990



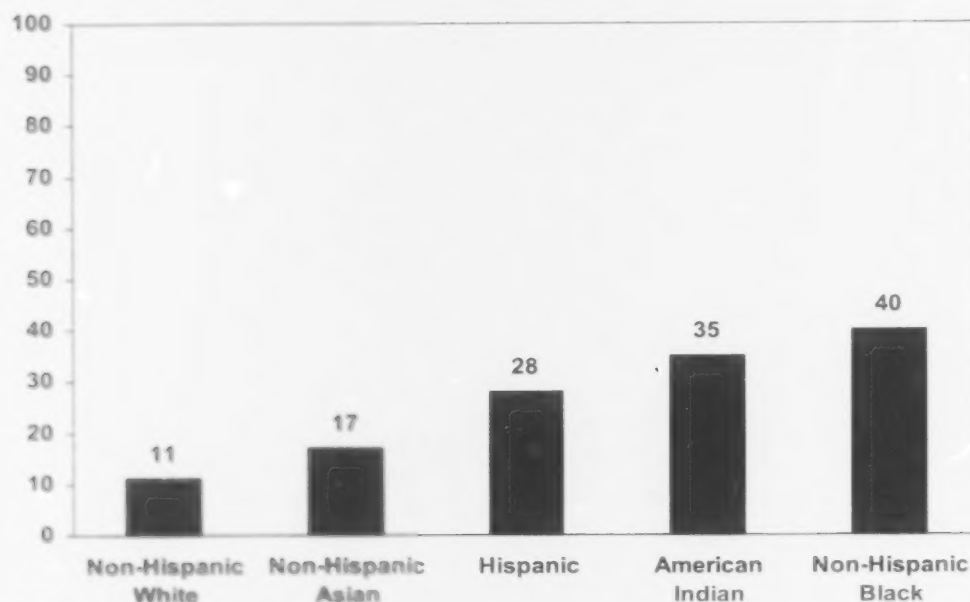
Note: See Technical Appendix for description of variables.

Source: Hernandez and Darke, 1999.

Poverty rates differed enormously in both the 1960 and 1990 censuses among first- and second-generation children by country of origin, and among third- and later-generation children by race and ethnicity; for example, in 1989 among third- and later-generation children, the poverty rate rises from only 11 percent for non-Hispanic white children to 17, 28, 35, and 40 percent, respectively, for non-Hispanic Asian, Hispanic, American Indian, and non-Hispanic black children (Figure 5).

Figure 5

Percent in Official Poverty for Third-and-Later-Generation Children by Race and Hispanic Origin: 1990



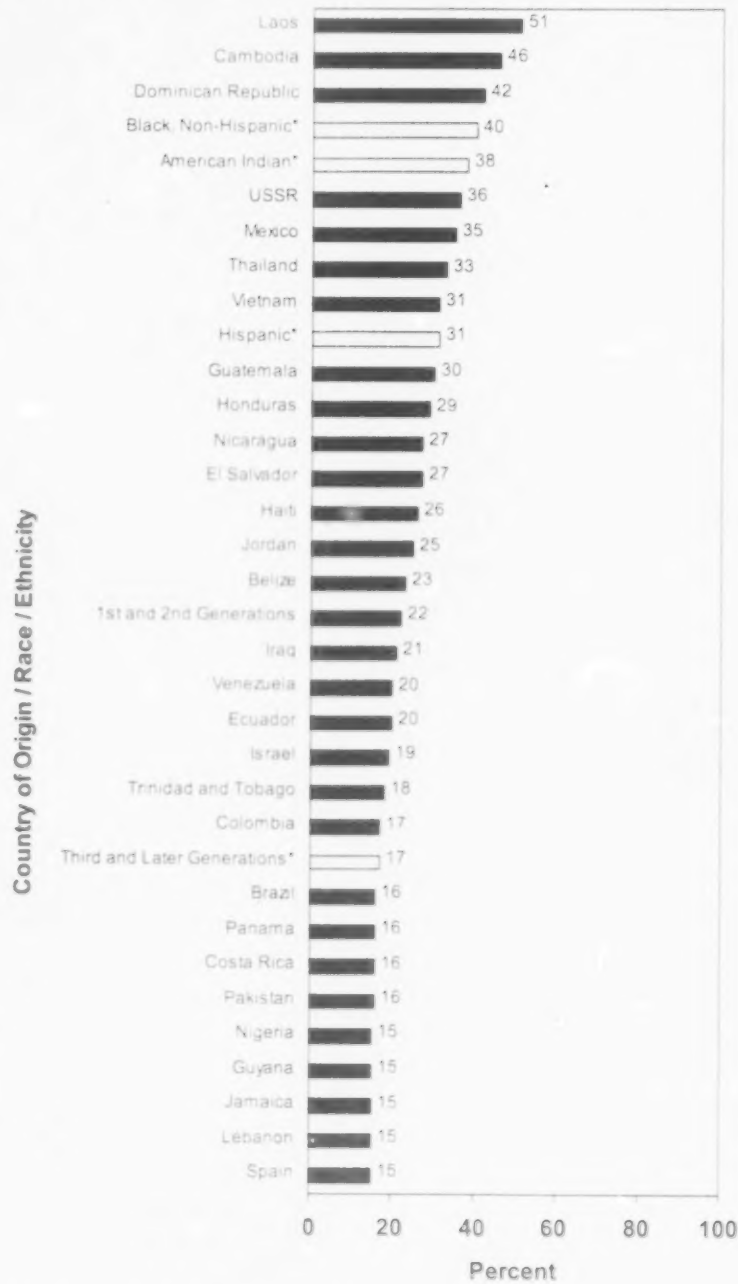
Note: See Technical Appendix for description of variables.

Source: Hernandez and Darke, 1999.

Similarly, among first- and second-generation children from about two dozen countries spread across Latin America and the Caribbean, Asia, Europe, the Middle East, and Africa, poverty rates were about equal to, or substantially less than, the rate of 11 percent for third- and later-generation non-Hispanic white children in 1989 (Figure 6 and Table A). But for first- and second-generation children from 12 other countries in 1989, poverty rates were quite high, ranging from 26 to 51 percent depending on the country of origin. In view of the negative risks associated with poverty generally, the situation of children from these 12 countries is of particular concern.

Figure 6 (Part 1)

Percent in Official Poverty for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



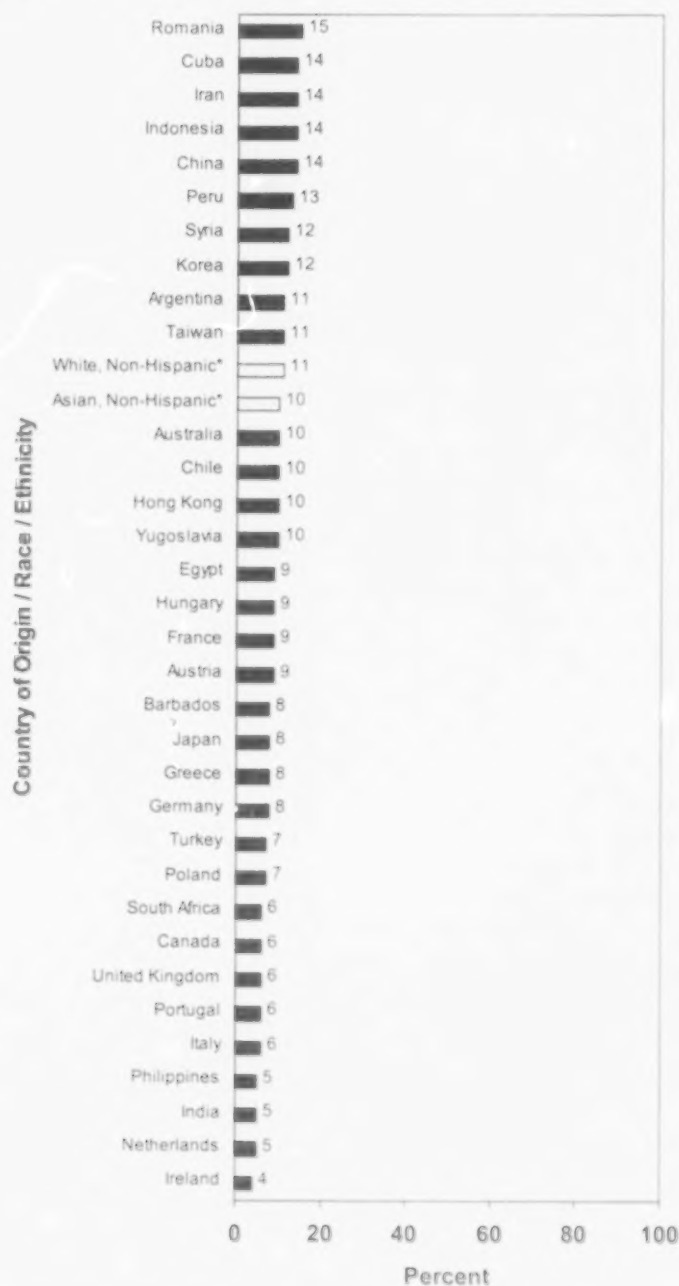
* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 6 (Part 2)

Percent in Official Poverty for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.v

Five of these 12 countries are the source of many officially recognized refugees (former Soviet Union, Cambodia, Laos, Thailand, Vietnam); three are war-torn countries in Central America (El Salvador, Guatemala, and Nicaragua); and three are small and impoverished Central American or Caribbean countries (Honduras, Haiti, Dominican Republic) which are sources of unskilled labor migrants. The twelfth country is Mexico, which currently sends the largest number of both legal and illegal unskilled labor immigrants, and which has been a ready source of unskilled labor for the U.S. economy throughout the twentieth century (Romo, 1996; Rumbaut, 1996). Within the racial and ethnic stratification system of the U.S., most children from 11 of these 12 countries, with the former Soviet Union as the sole exception, are classified as Hispanic, Asian, or black.

First- and second-generation children with origins in these 12 countries accounted for 47 percent (3.9 million) of all first- and second-generation children in 1990 (8.3 million), but they accounted for 72 percent of the first- and second-generation children who lived in poverty. Moreover, Mexico alone accounted for 31 percent (2.6 million) of all first- and second-generation children, but 49 percent of those officially classified as poor in the 1990 census.

In fact, the poverty rate among first- and second-generation children, especially those from Mexico, is at least somewhat higher. Analyses of the National Agricultural Workers Survey (NAWS), commissioned by the Committee on the Health and Adjustment of Immigrant Children and Families indicate that more than 67 percent of U.S.-based children in migrant farm worker families lived in poverty in each year from 1993 to 1995, that is, more than 590,000 of the 880,000 total (Mines, 1999). Insofar as a substantial portion of migrant farm worker families and their children, especially those of Mexican origin who account for 69 percent of the U.S.-based children in the NAWS, are not enumerated in the decennial census, the total number (and percent) of children in immigrant families, especially of Mexican origin, who were living in poverty was higher, perhaps by several hundred thousand (and several percentage points), than indicated by the decennial census data.

Poverty rates for children in immigrant families in 1989 were lower, sometimes much lower, for second-generation children than for the first generation for nearly all countries of origin, including most of the 12 countries with the highest poverty rates (Table B). But for children with origins in Mexico, who account for about two-thirds of the children in immigrant families from these 12 countries, the poverty rates for the second generation and the third and later generations were quite similar, at 32 and 28 percent respectively, which is 2.5 to 3 times greater than for third- and later-generation non-Hispanic white children.

Among children with origins in the four Central American countries for which information is available for all three generations (Tables B and C), the decline in poverty from the second to the later generations is somewhat larger than for Mexican-origin children, and the levels for the poverty rates for the later generations are 14-17 percent, only somewhat greater than for third- and later-generation non-Hispanic white children (11 percent). This might reflect greater intergenerational assimilation of children from these four countries than from Mexico. But a plausible alternative explanation derives from the possibility that immigrants from these countries during the past two decades, escaping war-torn conditions in El Salvador, Nicaragua, and Guatemala, may have had substantially lower socioeconomic status, on average, than did immigrants from these countries during earlier decades; for example, among first- and second-generation children with Central American origins other than Mexico in 1960, the proportions with fathers in the home who graduated from high school were 61 and 69 percent, respectively, for the first and second generation, compared to 51 percent for third- and later-generation non-Hispanic white children. Thus, the apparent improvement between the second generation and the third and later generations of children in 1990 from Central American countries other than Mexico may reflect differences in socioeconomic status of parents as they entered the United States rather than intergenerational socioeconomic assimilation.

Children in immigrant families with origins in the Dominican Republic and Haiti also have very high poverty rates, but they are nearly the same for the first and second generations (41 and 42 percent for the Dominican Republic, 30 and 26 percent for Haiti), and available data for the Dominican Republic indicates no change for the third and later generations (40 percent).

The continuing high poverty rates of second- and of third- and later-generation children from these Caribbean countries and from Mexico suggest that the black and Hispanic children from these countries have experienced limited socioeconomic opportunities even, in the case of Mexican-origin children, after many generations. For those of Mexican origin, the pattern has been quite consistent since at least 1959, when the poverty rates for the first, second, and third and later generations were 58, 48, and 53 percent, respectively, that is, about 2.5 to 3 times greater than the rate of 19 percent for third- and later-generation non-Hispanic white children. Thus, among third- and later-generation children in 1959, those with origins in Mexico had a poverty rate of 53 percent, or about four-fifths as large as among black and American Indian children, who had poverty rates of 67 and 69 percent, respectively.

Although official poverty rates declined by approximately two-fifths between 1959 and 1989 for third- and later-generation children belonging to each of these racial and ethnic groups, Mexican-origin, black, and American Indian children all have continued to experience highly elevated risks of poverty, compared to third- and later-generation non-Hispanic white children. This historical continuity in the economic deprivation of children belonging to these racial and ethnic minorities raises the following question for the new Central American immigrant populations of Hispanic origin. Will they tend to assimilate socioeconomically to the level of non-Hispanic whites or to the level of Mexican-origin Hispanics?

Of course, it is possible that a substantial portion of third- and later-generation children with a Mexican-origin parent or grandparent also have a parent or grandparent(s) with non-Mexican origins, and that such children tend not to be reported as Mexican-origin and tend to have lower poverty rates than children with two Mexican-origin parents or four Mexican-origin grandparents who are reported as Mexican origin. As of 1990, 9 percent of third- and later-generation children who were identified as Mexican-origin, or as having at least one Mexican-origin parent, had a Mexican-origin parent but were not themselves identified as Mexican-origin. The exclusion of these children from the poverty estimates above can affect the poverty rates of third- and later-generation Mexican-origin children by no more than a percentage point or two. Additional research is required to assess the effect for third- and later-generation children on measured poverty of marriages between Mexican-origin and non-Mexican-origin grandparents or great-grandparents. But available estimates suggest a continuing pattern of economic disadvantage as measured by official poverty for third- and later-generation Mexican-origin children which, compared to third- and later-generation non-Hispanic whites, is similar to, though somewhat less extreme than, the restricted opportunities for socioeconomic advance experienced historically by black and American Indian children. Official poverty rates among third- and later-generation children in the 1990 census were 11 percent for non-Hispanic whites, 28 percent for Hispanics, and 40 and 39 percent, respectively, for non-Hispanic blacks and American Indians.

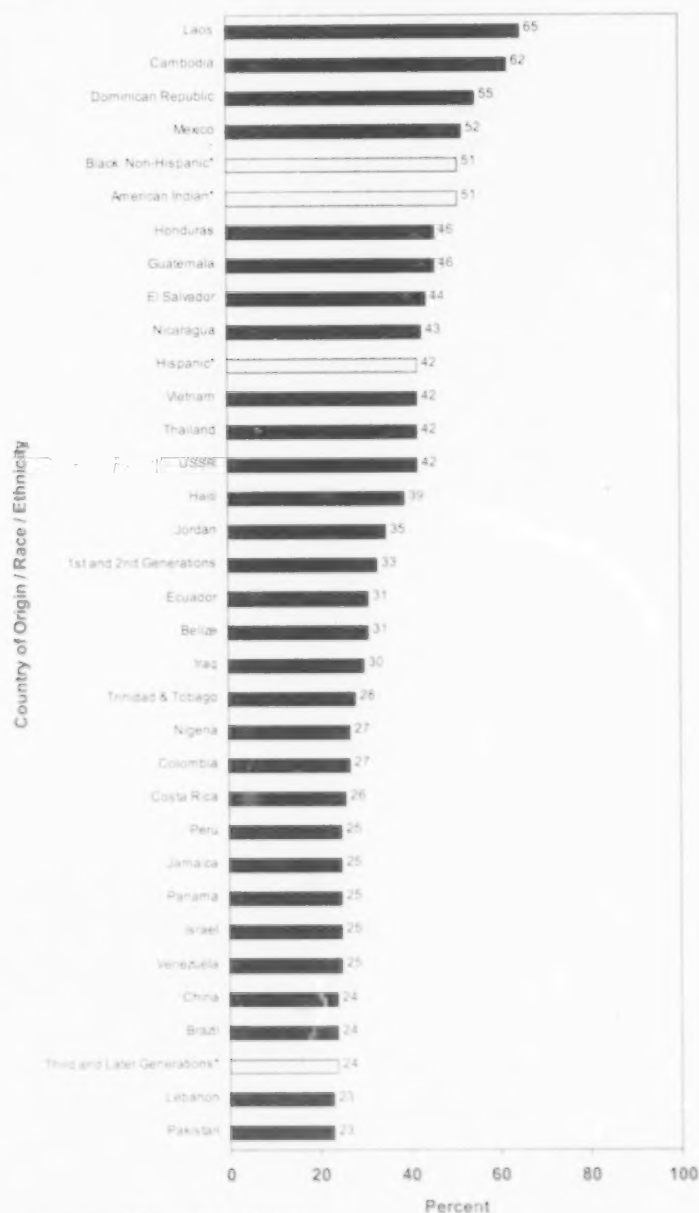
Alternative measures of "relative poverty" and of income inequality are valuable for historical as well as international comparisons, because they take into consideration changes in the real standard of living that occur through time and that exists across countries (Smith, 1776; Galbraith, 1958; Fuchs, 1965; Rainwater, 1974; Expert Committee on Family Budget Revisions, 1980; Ruggles, 1990; Hernandez, 1993; Smeeding and Torrey, 1995; Citro and Michael, 1995). A "relative" income measure that has been used to study historical changes experienced by children since the Great Depression is defined (taking family composition into account in a fashion similar to the official poverty measure) as follows: relative poverty is an income less than 50 percent of median family income during a given year, near-poor frugality is at least 50 percent but less than 75 percent of median family income, middle-class comfort is at least 75 percent but less than 150 percent of median family income, and luxury level income is 150 percent or more of the median family income level (Hernandez, 1993).

The relative and official poverty rates were quite similar in 1959, but by 1989 relative poverty rates were substantially higher. Among first- and second-generation children from the 12 countries of origin with the highest official child poverty rates, the relative poverty rates were about three- to six-tenths higher than the official poverty rates (Figure 7 and Table A). Hence, the official poverty rates ranged from 25 to 51 percent for these countries, compared to 35 to 66 percent using the relative poverty measure. Overall, the relative poverty rate for first- and second-generation children was 33 percent, compared to 24 percent for third- and later-generation children in 1989 (Figure 8). The patterns of relative poverty across the first, second, and third and later generations by country of origin were similar to the patterns in official

poverty, but at generally higher levels (Tables A and A). Overall, the relative poverty rate for the second generation was somewhat greater than for the third and later generations, at 29 and 24 percent, respectively, but enormously larger at 47 percent for the first generation.

Figure 7 (Part 1)

Percent in Relative Poverty for First and Second Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



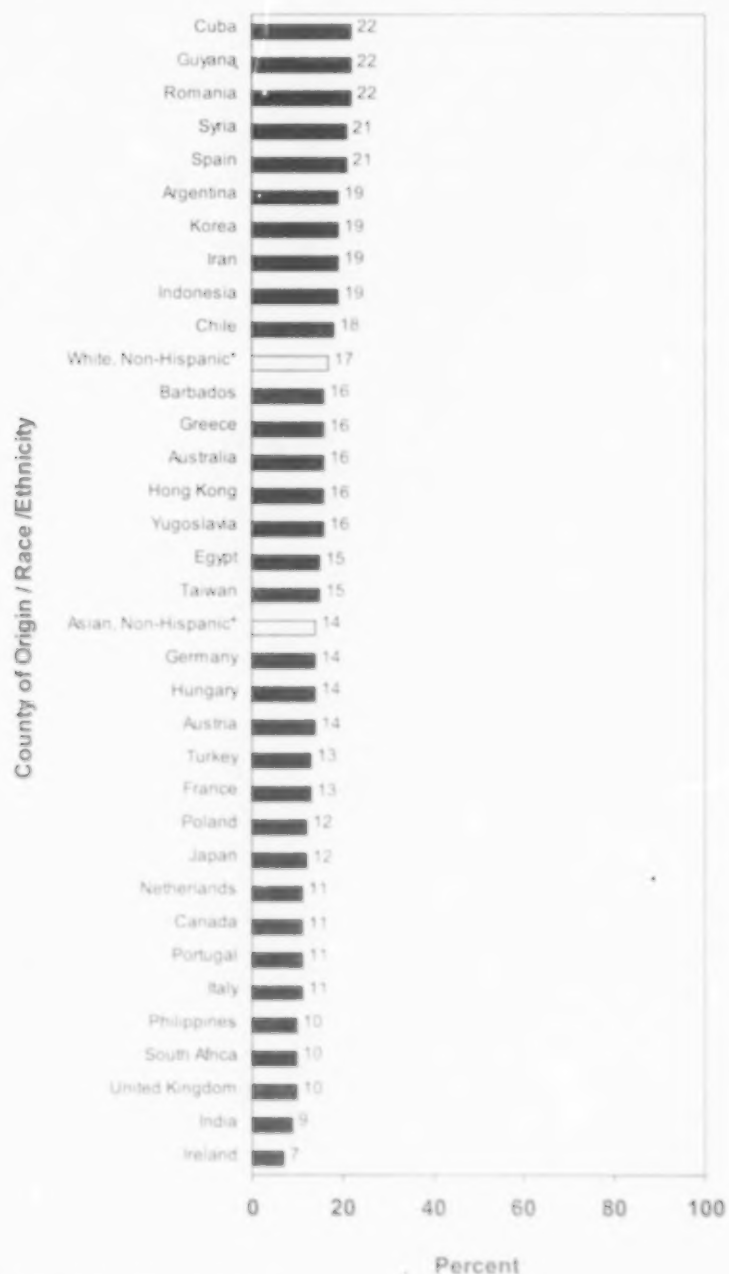
* Third and later generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 7 (Part 2)

Percent in Relative Poverty for First and Second Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



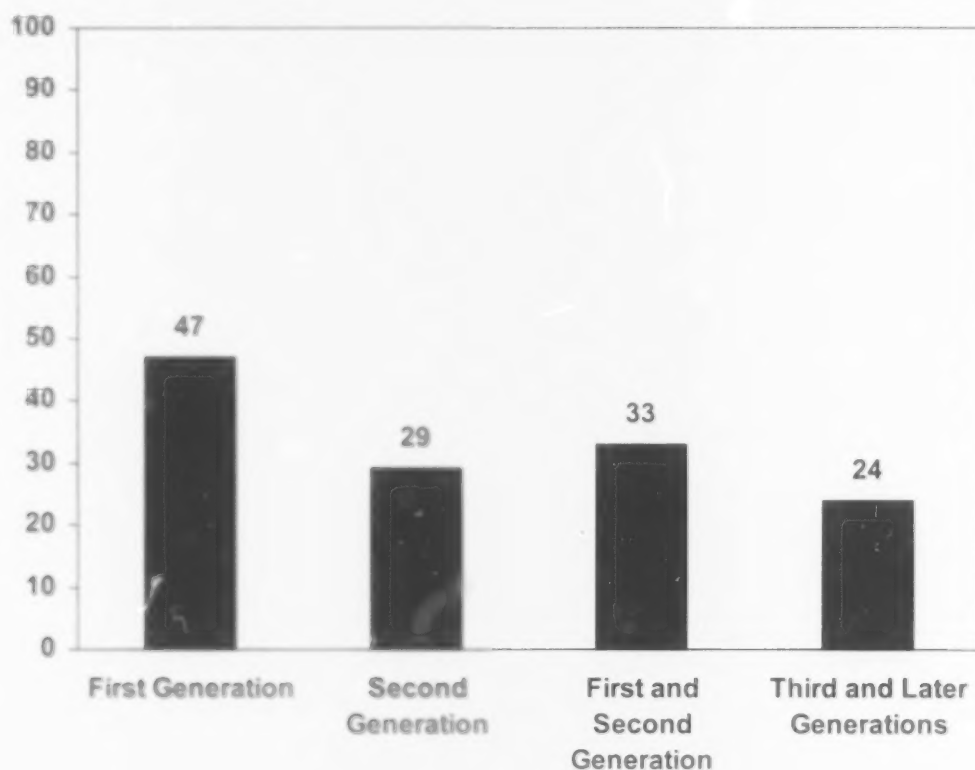
* Third and later generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 8

Percent in Relative Poverty for First-, Second-, and Third-and-Later-Generation Children: 1990



Note: See Technical Appendix for description of variables.

Source: Tables A and B, and Hernandez and Durkin, 1999.

At the other end of the income distribution, middle-class or luxury level family incomes represent important resources for children. Although poverty rates for first- and second-generation children exceeded those for third- and later-generation children using the official and relative measures, respectively, by 5 and 11 percentage points, the proportion with luxury level income was nearly as high for first- and second-generation children as third- and later-generation children, at 19 and 22 percent, respectively (Table A). In fact, among children from 36 of the 62 countries of origin that each accounted for at least 15,000 children in immigrant families in the 1990 census, the proportions living in luxury were 25 percent or more, that is, at a level equal to or exceeding the 26 percent for third- and later-generation non-Hispanic white children. These 36 countries included 13 of 14 European countries, 10 of 14 Asian countries, 3 of 6 Middle-eastern countries, 4 of the 8 South American countries, as well as Egypt, South Africa, Australia, and Canada, but only 1 Caribbean country (Cuba), and no Central American countries.

Among first- and second-generation children from most of these countries, the combined proportion with middle-class or luxury level family incomes also equaled or exceeded the 69 percent experienced by third- and later-generation non-Hispanic white children (Figure 9 and Table A); thus children in immigrant families from more than half of the countries of origin accounting for at least 15,000 children in 1990 experienced family economic resources at least as great as third- and later-generation non-Hispanic white children.

Across the income spectrum, then, children in immigrant families were much more likely than third- and later-generation children to have family incomes below the relative poverty threshold in 1989, but only slightly less likely to have incomes at the luxury level. Hence, children in immigrant families experience substantially greater economic inequality than third- and later-generation children. Moreover, children in immigrant families from various countries are extremely diverse in the economic resources in their homes. Children in immigrant families from about a dozen countries experience levels of economic deprivation similar to those of third- and later-generation black, Hispanic, and American Indian children, and most of the children from these countries are Hispanic, black, or Asian. At the opposite extreme, children in immigrant families from more than two dozen countries experience economic resources similar to or greater than third- and later-generation non-Hispanic white children, and these countries are drawn from all regions of the world except Central America and the Caribbean (with Cuba as the lone exception).

Figure 9

Percent with Middle-Class or Luxury-Level Incomes for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



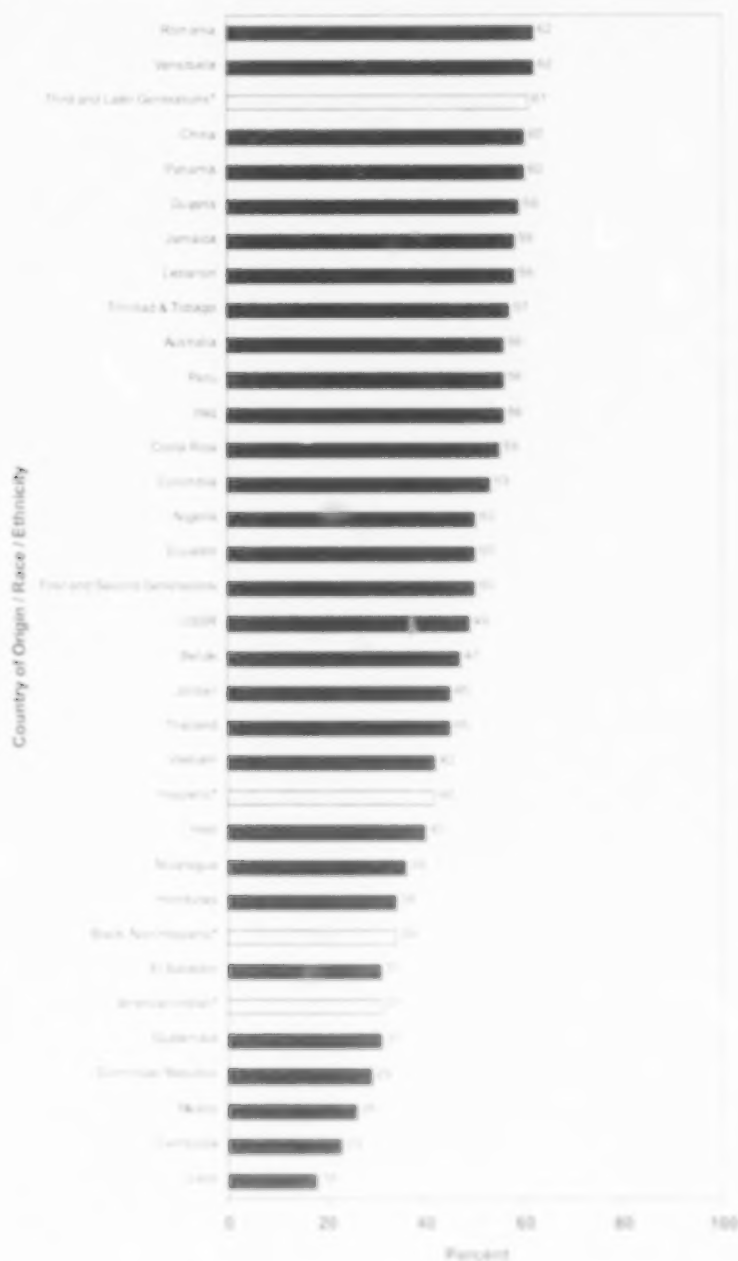
* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 9

Percent with Middle-Class or Luxury-Level Incomes for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



* Third and later-generation children shaded light.

Note: See Technical Appendix for description of variables.

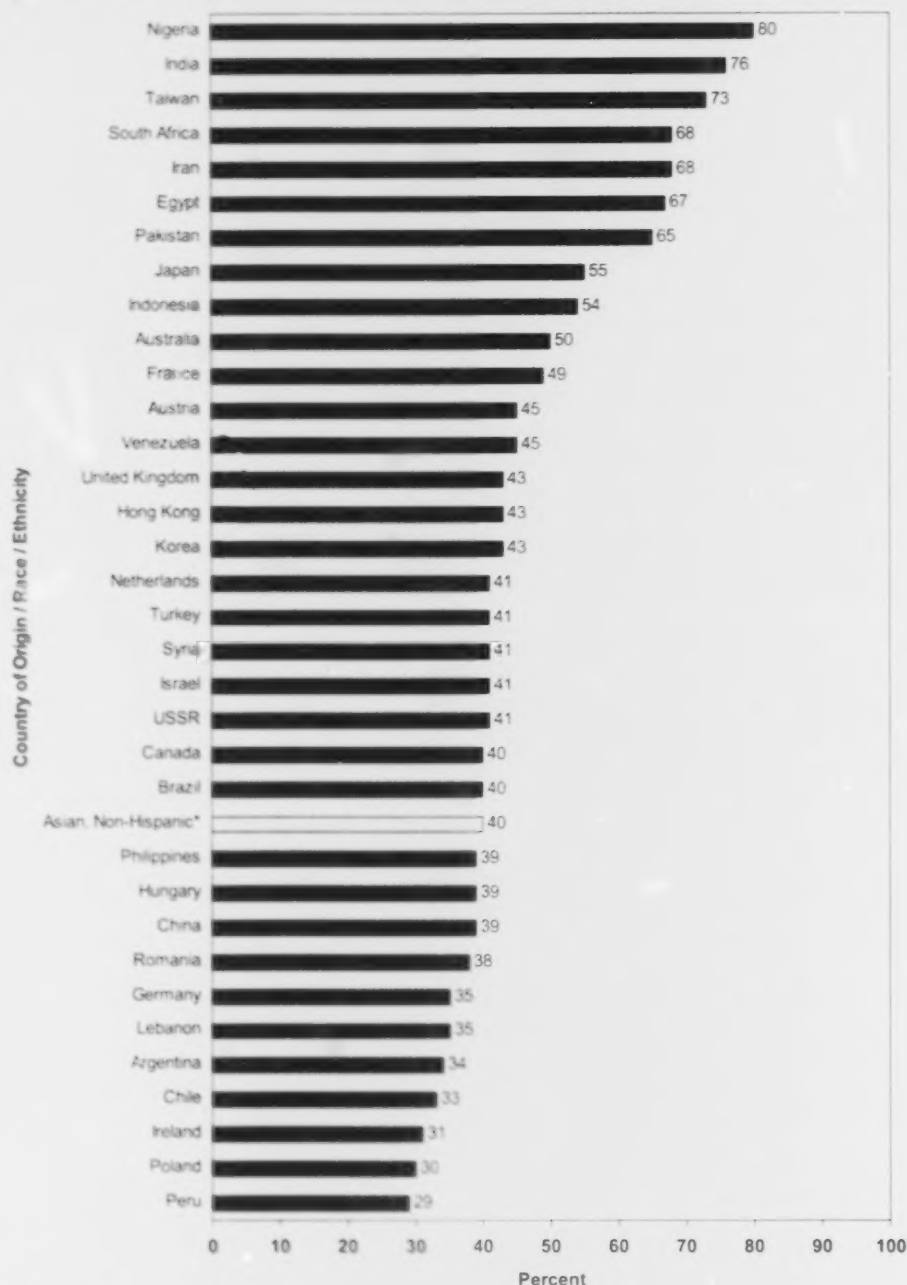
Source: Table A and Hernandez and Dutka, 1999.

PARENTS' EDUCATION

Children in immigrant families and third- and later-generation children in families with a father in the home were about equally likely in 1990 to have fathers who had graduated from college (23 to 26 percent), and the corresponding generations in families with mothers in the home were about equally likely to have mothers who had graduated from college (14 to 18 percent) (Hernandez and Darke, 1999). In addition, in 1990, among first- and second-generation children from about two dozen countries, 35 percent or more had a father in the home who had graduated from college, higher than the 29 percent recorded for third- and later-generation non-Hispanic whites (Figure 10). For a similar number of countries, 25 percent or more had a mother in the home who had graduated from college, notably higher than the 20 percent for third- and later-generation non-Hispanic whites (Figure 11). All of these proportions with parents graduating from college were at least 2 to 3 times greater than the corresponding rates for third- and later-generation black, Hispanic, and American Indian children.

Figure 10 (Part 1)

Percent with Fathers Graduating from College, Among those with Fathers in the Home, for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



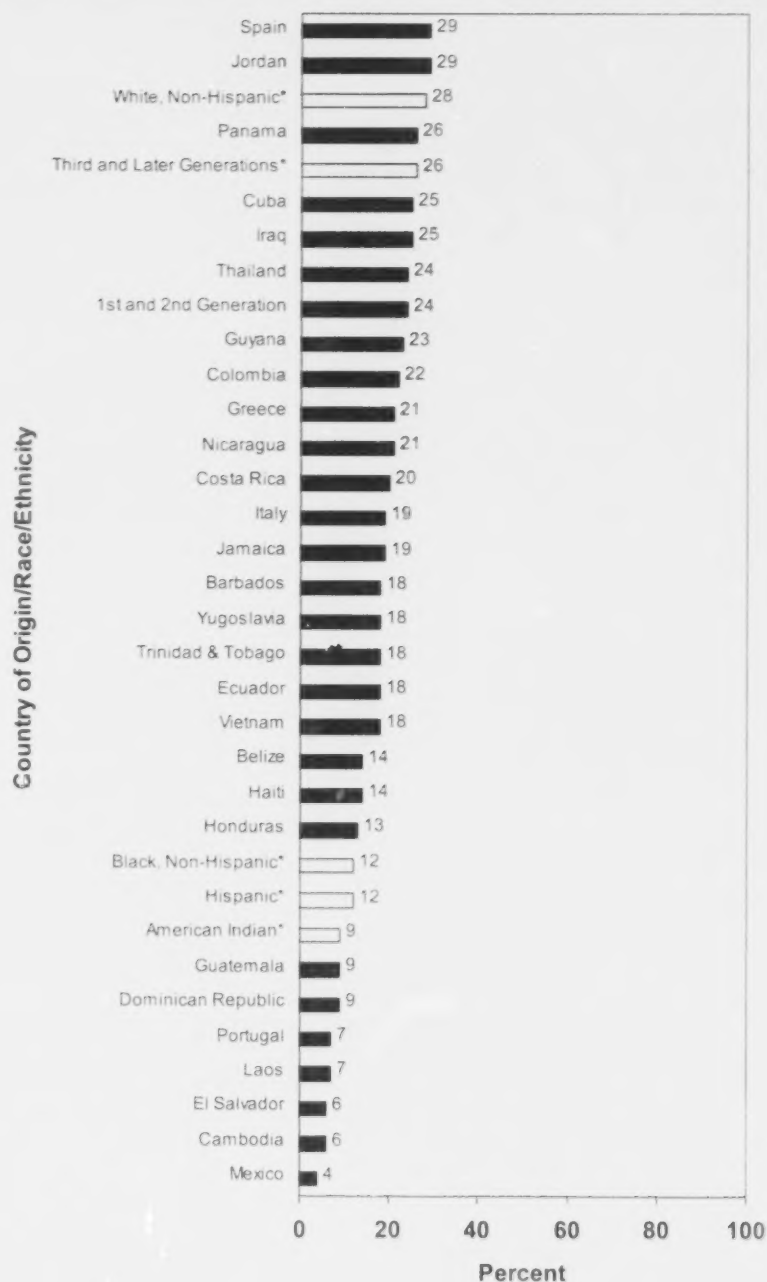
* Third-and-later- generation children shaded lightly

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 10 (Part 2)

Percent with Fathers Graduating from College, Among those with Fathers in the Home, for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



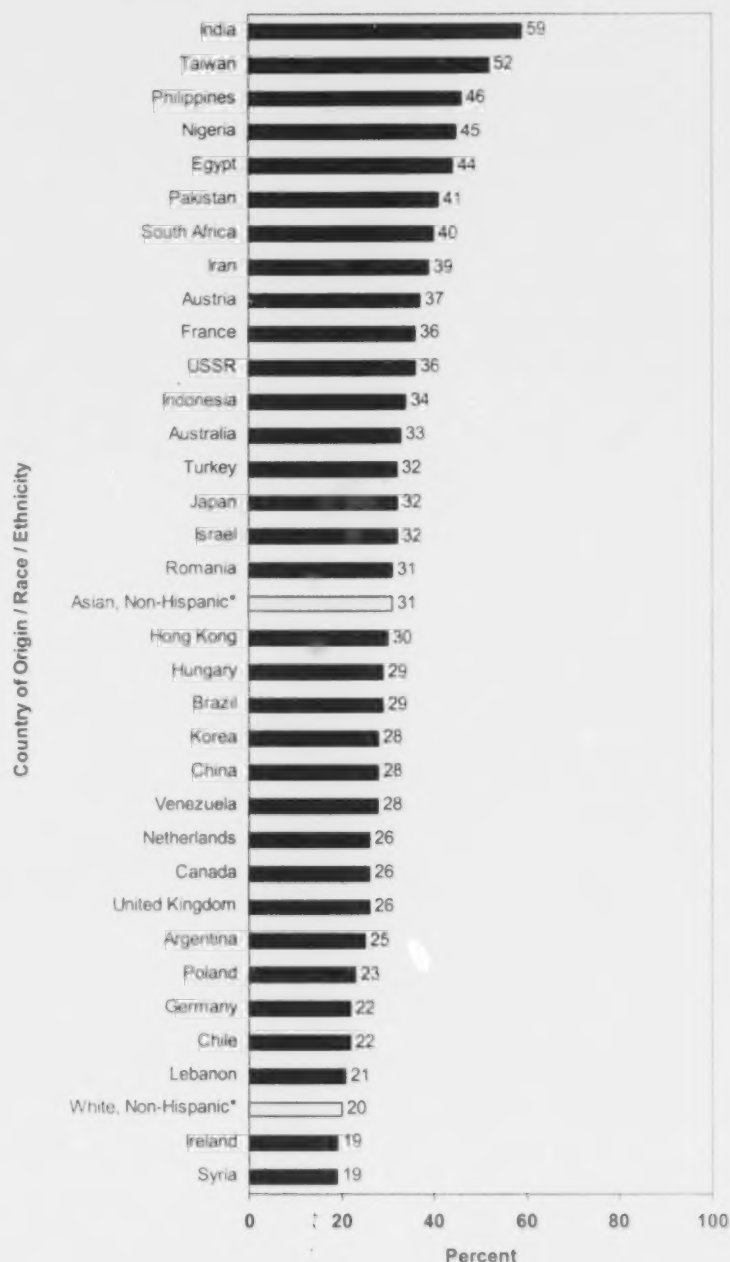
* Third-and-later- generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 11 (Part 1)

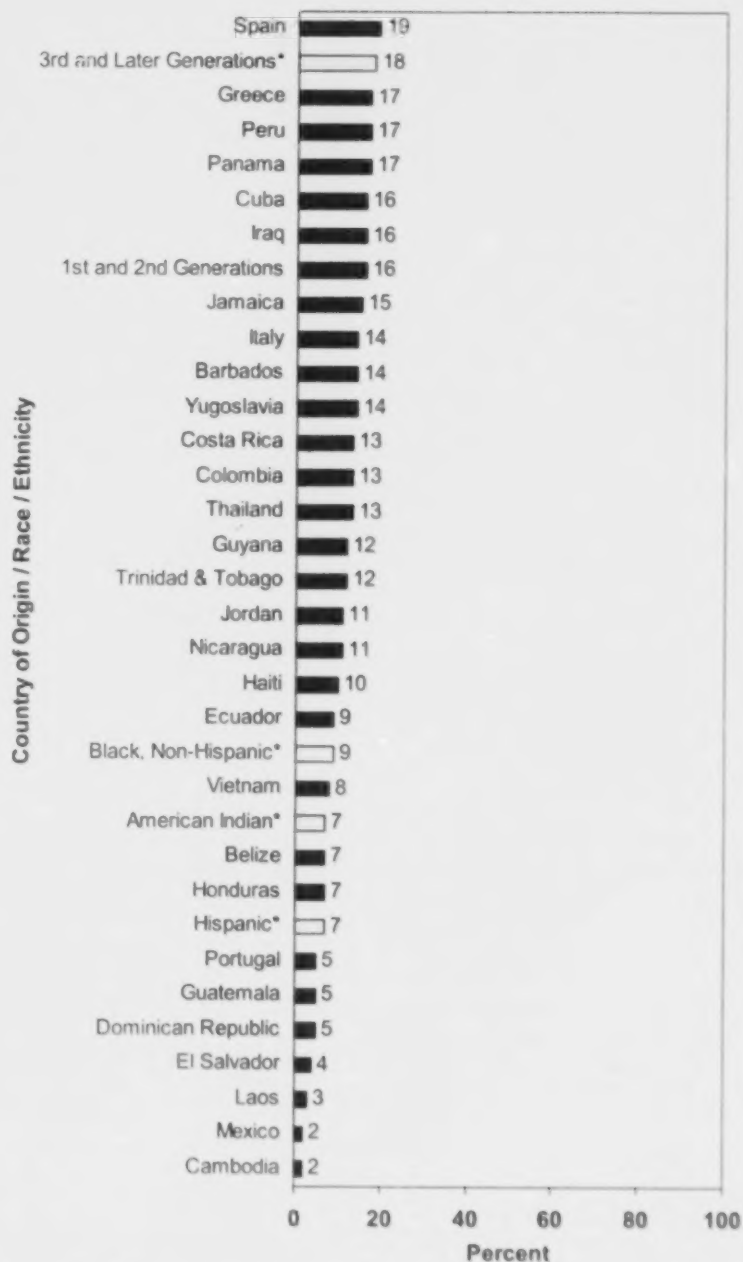
Percent with Mothers Graduating from College, Among those with Mothers in the Home, for First- and Second-Generation Children by Country of Origin, and Third- and Later-Generation Children by Race and Ethnicity: 1990



* Third- and later-generation children shaded lightly.
 Note: See Technical Appendix for description of variables.
 Source: Table A and Hernandez and Darke, 1999.

Figure 11 (Part 2)

Percent with Mothers Graduating from College, Among those with Mothers in the Home, for First- and Second-Generation Children by Country of Origin, and Third-and Later-Generation Children by Race and Ethnicity: 1990



* Third-and-later-generation children shaded lightly.

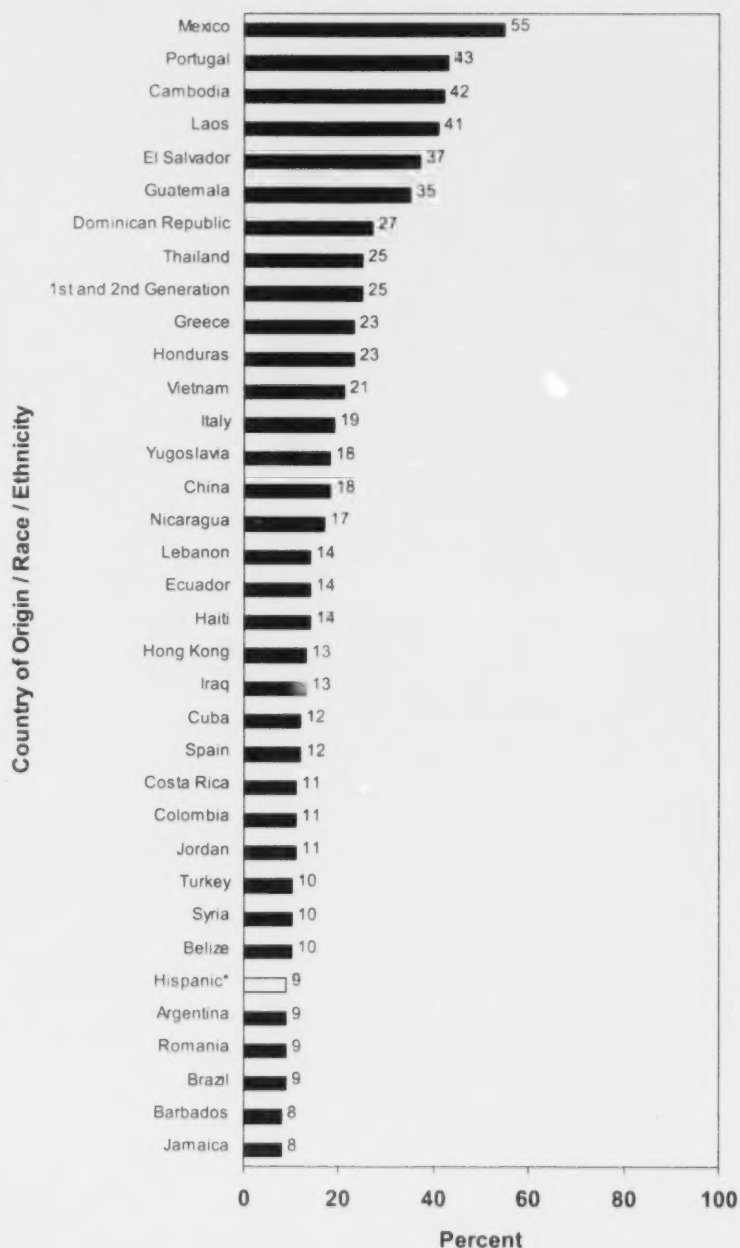
Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

But children in immigrant families, overall, were also much more likely than third- and later-generation children to have parents with very low educational attainments, and this was especially true for the 12 countries of origin with children at greatest risk of living in poverty, with the sole exception of the former Soviet Union (Figures 12 and 13, and Table A); for example, among children living with fathers, the overall proportions with fathers not graduating from high school were 2 to 3 times greater for the first- and second-generation children than for the third- and later-generations, at 49, 36, and 15 percent respectively, and this difference is accounted for almost completely by differences in the proportions with fathers completing *no more than eight years of schooling*, which for the three generations were 34, 23, and 3 percent, respectively. Patterns in mothers' education were quite similar.

Figure 12 (Part 1)

Percent with Fathers Completing 8 or Fewer Years of Education, Among those with Fathers in the Home, for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



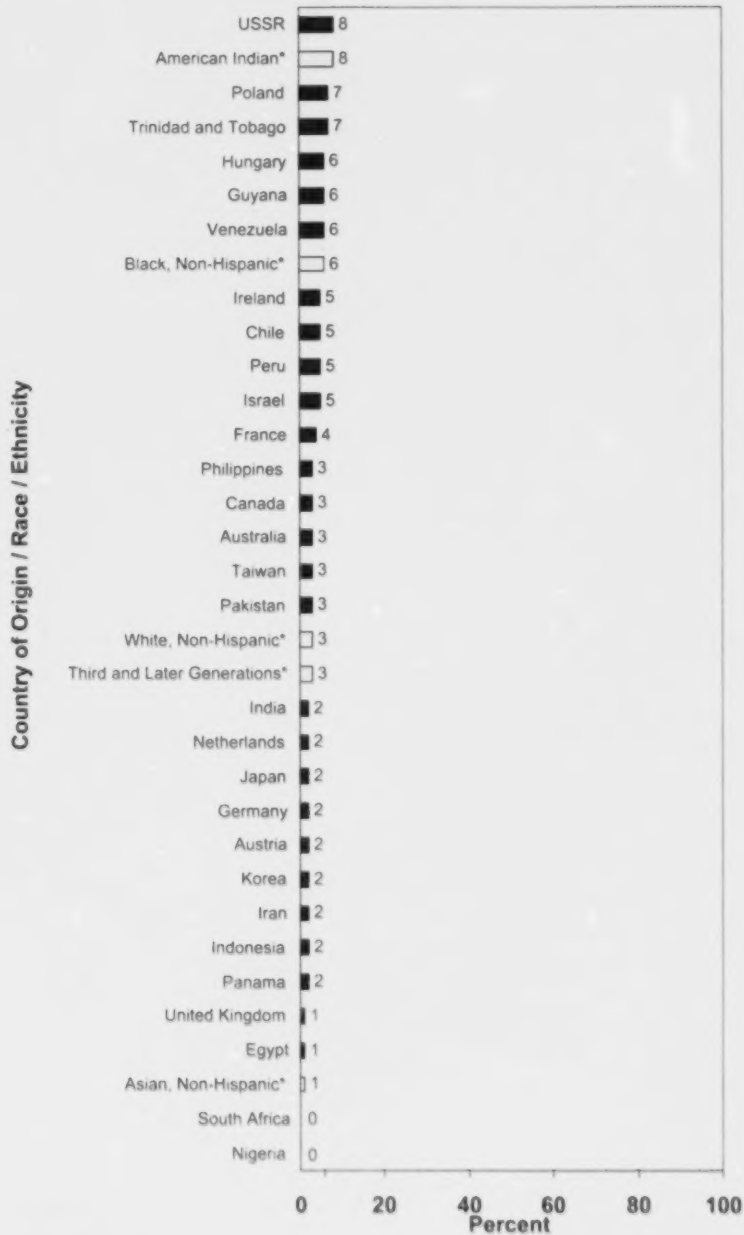
* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 12 (Part 2)

Percent with Fathers Completing 8 or Fewer Years of Education, Among those with Fathers in the Home, for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



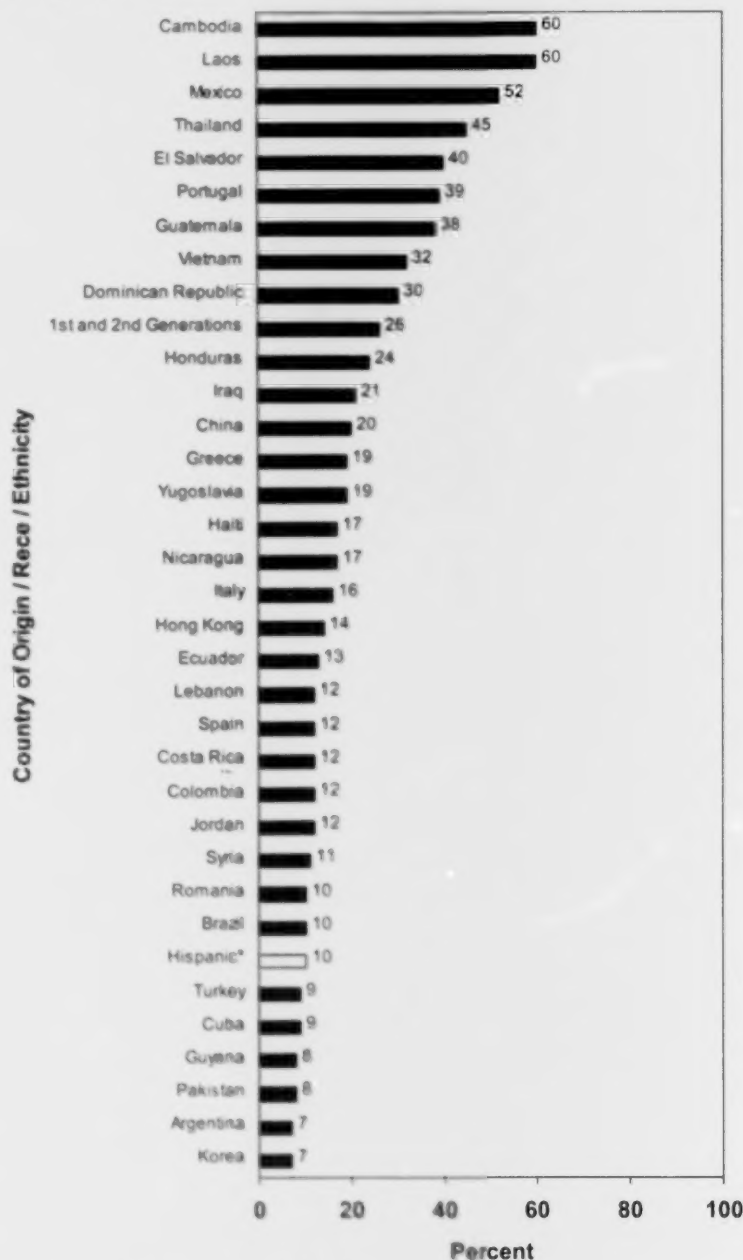
* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 13 (Part 1)

Percent with Mothers Completing 8 or Fewer Years of Education, Among those with Mothers in the Home, for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



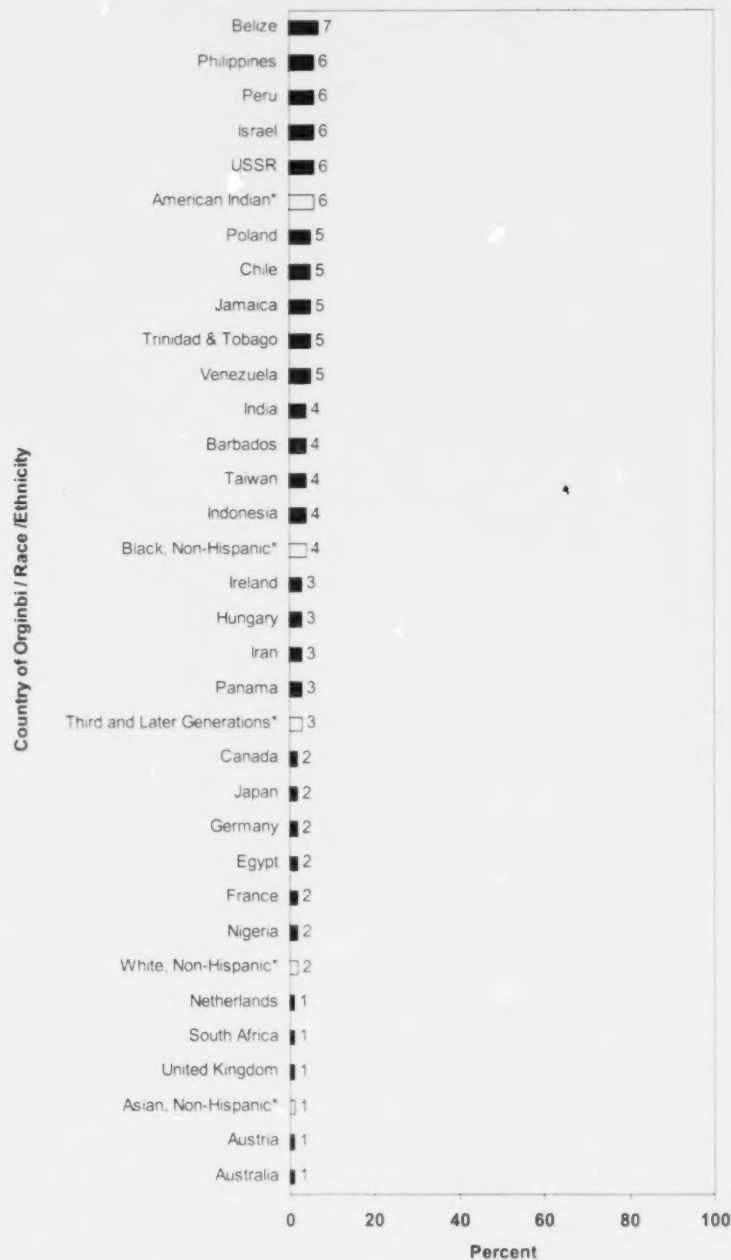
* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 13 (Part 2)

Percent with Mothers Completing 8 or Fewer Years of Education, Among those with Mothers in the Home, for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



* Third-and-later-generation children shaded lightly.

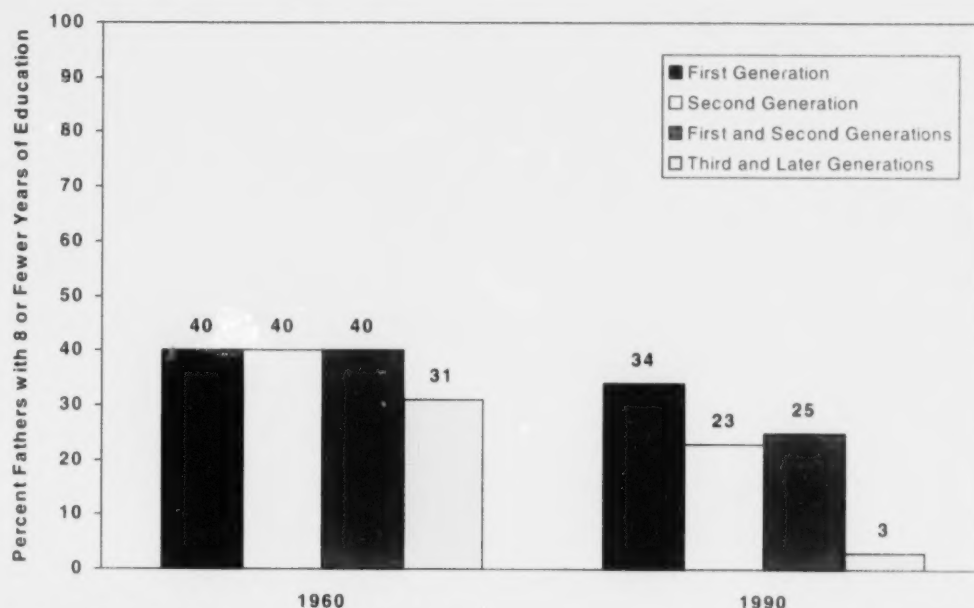
Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Generational differences in parental education followed a similar pattern in 1960, although differences in the proportions with very low educational attainments were substantially smaller than in 1990 (Figures 14 and 15); for example, among children with a father in the home, the proportions with fathers completing no more than eight years of school were 40 percent for both the first and the second generation, and 31 percent for the third and later generations. The only measure of educational attainment in the 1910 census is the literacy rate (Figure 16). Second and third and later generations of children were similar in their chances of having a parent in the home who was illiterate, at 9 to 14 percent, but the first generation was substantially more likely to have an illiterate father (22 percent) or mother (34 percent).

Figure 14

Percent with Fathers Completing 8 or Fewer Years of Education, Among Those with Fathers in the Home, for First-, Second-, and Third-and-Later-Generation Children: 1960 and 1990

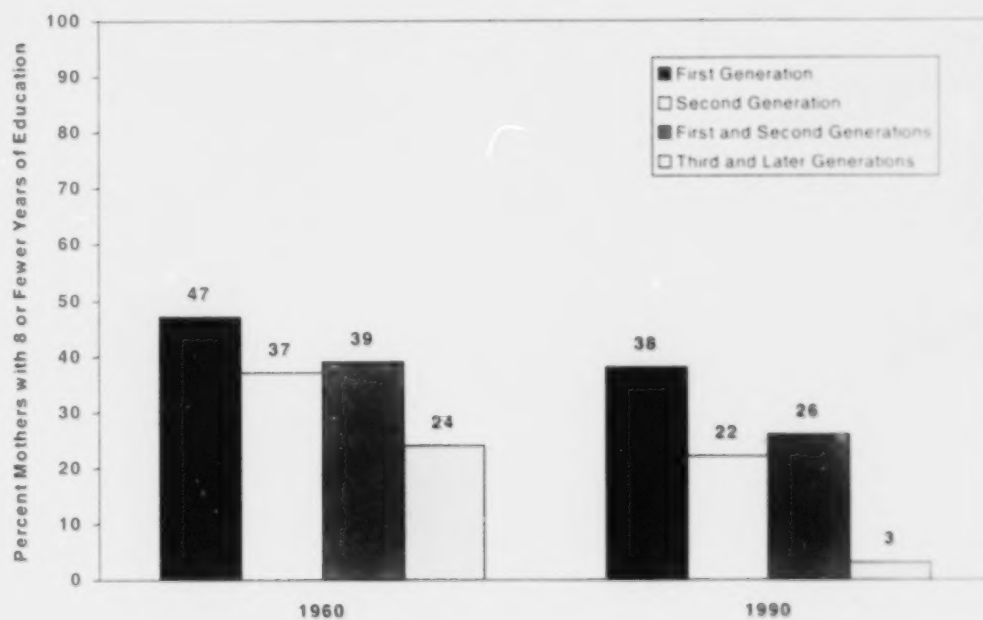


Note: See Technical Appendix for description of variables.

Source: Tables A and B, and calculated from 1960 Census IPUMS file.

Figure 15

Percent with Mothers Completing 8 or Fewer Years of Education, Among Those with Mothers in the Home, for First-, Second-, and Third-and-Later-Generation Children: 1960 and 1990

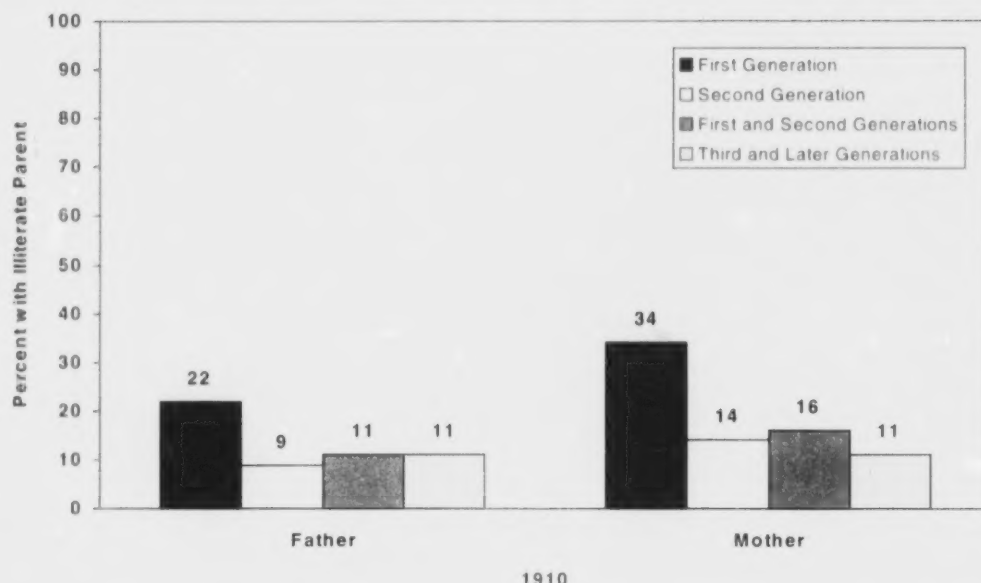


Note: See Technical Appendix for description of variables.

Source: Tables A and B, and calculated from 1960 Census IPUMS file.

Figure 16

Percent with Fathers and with Mothers Illiterate, Among Those with Designated Parent in the Home, for First-, Second-, and Third-and-Later-Generation Children: 1910



Note: See Technical Appendix for description of variables.

Source: Calculated from 1910 Census IPUMS file.

As with poverty, parental educational attainments vary enormously by country of origin for children in immigrant families, and by race and ethnicity among third- and later-generation children, both historically and today. In the 1990 census, children in immigrant families from the 12 countries with the highest poverty rates were also, with the exception of the former Soviet Union, somewhat to enormously more likely than third- and later-generation non-Hispanic whites to have parents in the home who had not graduated from high school or elementary school (Table A).

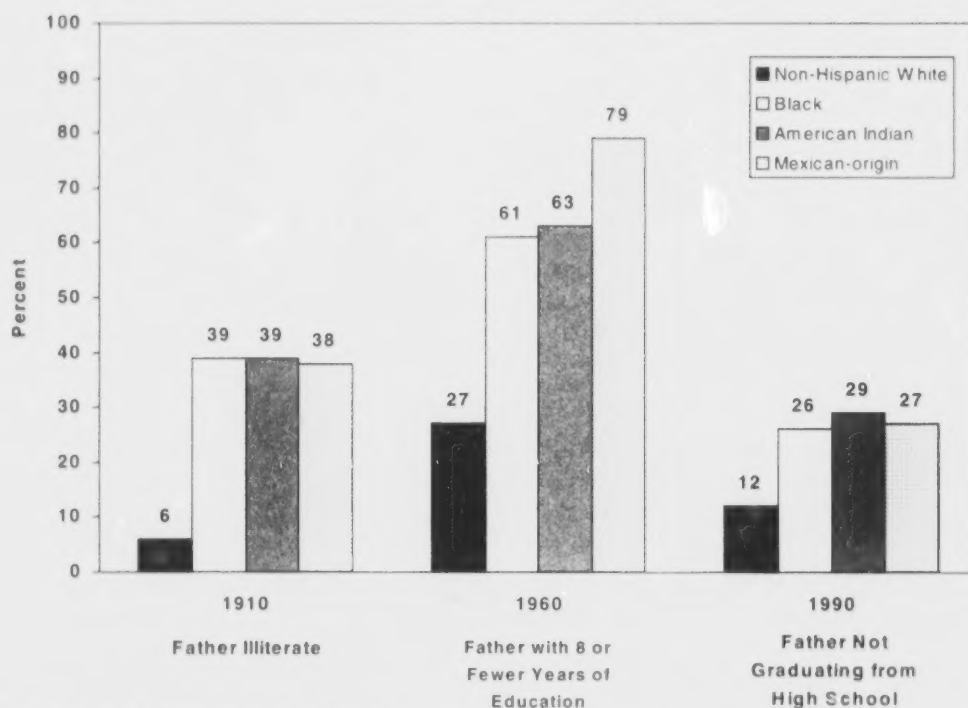
Among children from these 11 countries, parental educational attainments generally increase substantially from the first to the second to the third and later generations (Tables A, B, and C). But the proportion of third- and later-generation Mexican-origin children with parents in the home not graduating from high school remains in the range of 30-34 percent, similar to the level for third- and later-generation black children and American Indian children (26-29 percent), and 2 to 3 times greater than for third- and later-generation non-Hispanic white children (12 percent).

The disadvantage in parental educational attainments for Mexican-origin children, compared to non-Hispanic whites, has remained large throughout the century, at a level similar to that for black and for American Indian children. For example, in 1960 among Mexican-origin children living with a father, the proportion with a father completing no more than 8 years of schooling was 76 to 79 percent for first- and second-generation children in immigrant families, and for third- and later-generation Spanish surname children in the 5 southwestern states. Although some third- and later-generation Mexican-origin children lived outside the 5 southwestern states in 1960, and some Spanish surname children in these 5 states were not of Mexican origin, estimates for these children are, no doubt, approximately equal to the proportion for third- and later-generation Mexican-origin children throughout the United States at that time. The proportion with low parental educational attainments are greater than the corresponding

proportions of 61 to 63 percent for blacks and American Indians in 1960. But each of these minority groups was about 2.5 to 3 times more likely than non-Hispanic white children (26 percent) to have a father in the home with this little education (Figure 17).

Figure 17

Percent with Fathers Illiterate in 1910, Completing No More than 8 Years of Education in 1960, and Not Graduating from High School in 1990, Among Those with Fathers in the Home, for Third-and-Later-Generation Non-Hispanic White, Black, American Indian, and Mexican-origin Children



Note: See Technical Appendix for description of variables.

Source: Table C and calculated from 1910 Census and 1960 Census IPUMS files.

Similarly, at the upper end of the education distribution in 1960, the proportions with fathers in the home completing 12 years or more of school were only 13-19 percent for first- and second-generation Mexican-origin children, for third- and higher-generation Spanish surname children in the 5 southwestern states, and for blacks and American Indians. The corresponding proportion for non-Hispanic white children was more than 2.5 times greater at 51 percent.

Parental illiteracy rates are the only measure reflecting parental educational accomplishments in the 1910 census. Among children with a father in the home, the illiteracy rate was 66 percent for first-generation Mexican-origin children, and 37 to 39 percent for second- and later-generation Mexican-origin children, as well as for black and American Indian children. The corresponding father's illiteracy rate for white children was about one-sixth as great, at only 6 percent (Figure 17).

Between 1910 and 1990, the educational attainments of fathers in the homes of third- and later-generation children have improved greatly for Mexican-origin, black, and American Indian children, as well as

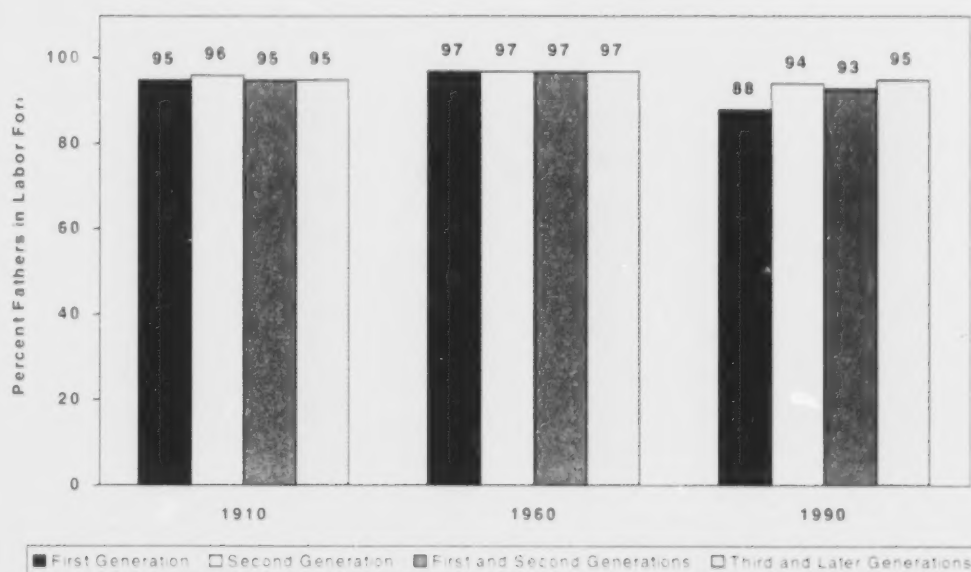
for non-Hispanic whites. But the gap separating the third- and later-generation racial and ethnic minorities from the third- and later-generation non-Hispanic whites remains large, and all three racial and ethnic minorities, Mexican-origin, black, and American Indian children, have experienced fairly similar levels of disadvantage throughout the century. Patterns of educational attainments across these groups and across the century for mothers in the home have been generally similar to those for fathers in the home.

PARENTS' LABOR FORCE PARTICIPATION

Throughout the century, the overwhelming majority of first-, second-, and third- and later-generation children with fathers in the home have had fathers who worked in the labor force (Hernandez and Darke, 1999). Among first-, second-, and third- and later-generation children the proportions ranged between 95-96 percent in 1910, and between 96-97 percent in 1960. As of 1990, 88 percent of first generation children with fathers in the home had a father in the labor force, compared to 94-95 percent for the corresponding second and later generations (Figure 18). The combined proportion for the first and second generations in 1990 was 93 percent, only slightly less than the 95 percent for the third and later generations. Differences in labor force participation rates among fathers in the homes of first-, second-, and third- and later-generation children cannot, therefore, account for most of the poverty differences between them in the 1960 or the 1990 censuses. Even among children in immigrant families from the 12 countries of origin with very high poverty rates of more than 25 percent in the 1990 census, the proportions with fathers in the home who were in the labor force was less than 89 percent for only the five countries of Cambodia, Laos, Thailand, Vietnam, and the former Soviet Union (Table A).

Figure 18

Percent with Fathers in Labor Force, Among Those with Fathers in the Home, for First-, Second-, and Third-and-Later-Generation Children: 1910, 1960, 1990



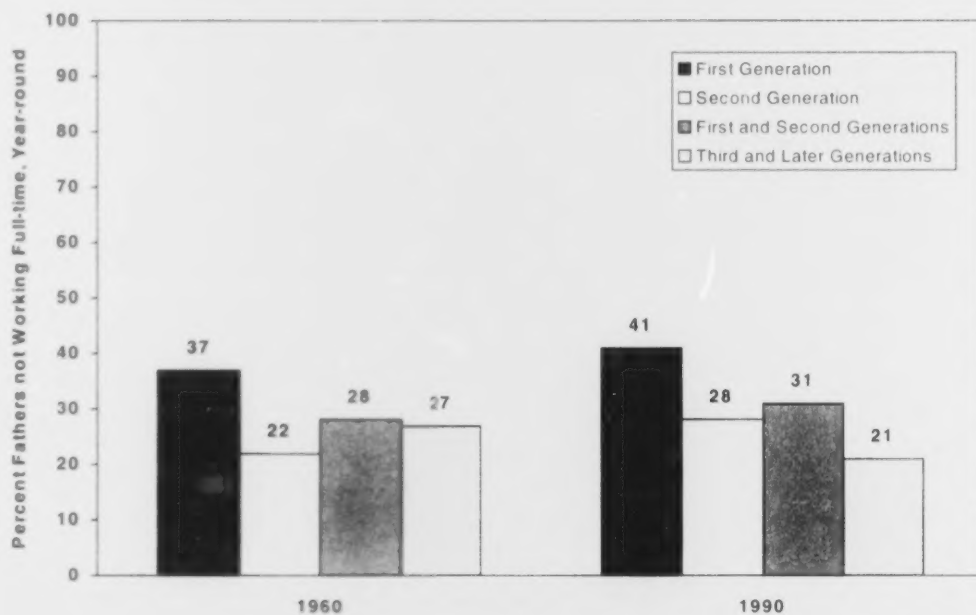
Note: See Technical Appendix for description of variables.

Source: Tables A and B, and calculated from 1910 Census and 1960 Census IPUMS files.

Despite high levels of employment among fathers in the homes of children in immigrant families, overall, and for most specific countries of origin, many fathers worked less than full-time year-round in 1990 (Tables A-1 and A-2). Little difference existed between children in immigrant families and third- and later-generation children in 1960 in their chances of having a father in the home who worked full-time year-round (72-73 percent), but by 1990, the difference had expanded to 10 percentage points (69 versus 79 percent) (Figure 19). In fact, it is the lack of full-time year-round work among fathers in the home, along with very low father's educational attainments and linguistic isolation from English-speaking culture, that is especially common among children from the 12 countries of origin with very high poverty rates (Figure 20 and Table A).

Figure 19

Percent with Fathers Not Working Full-time, Year-round, Among Those with Fathers in the Home, for First-, Second-, and Third-and-Later-Generation Children: 1960 and 1990

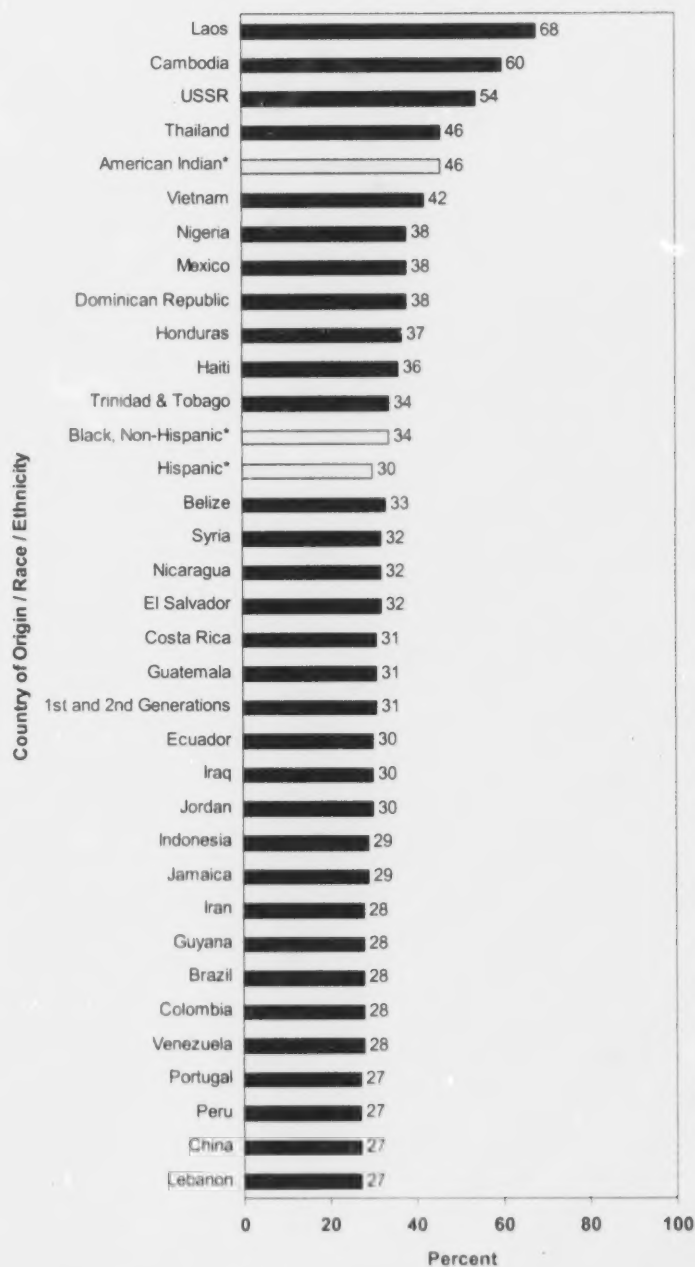


Note: See Technical Appendix for description of variables.

Source: Tables A and B, and calculated from 1960 Census IPUMS file.

Figure 20 (Part 1)

Percent with Fathers Not Working Full-Time, Year-Round, Among those with Fathers in the Home, for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



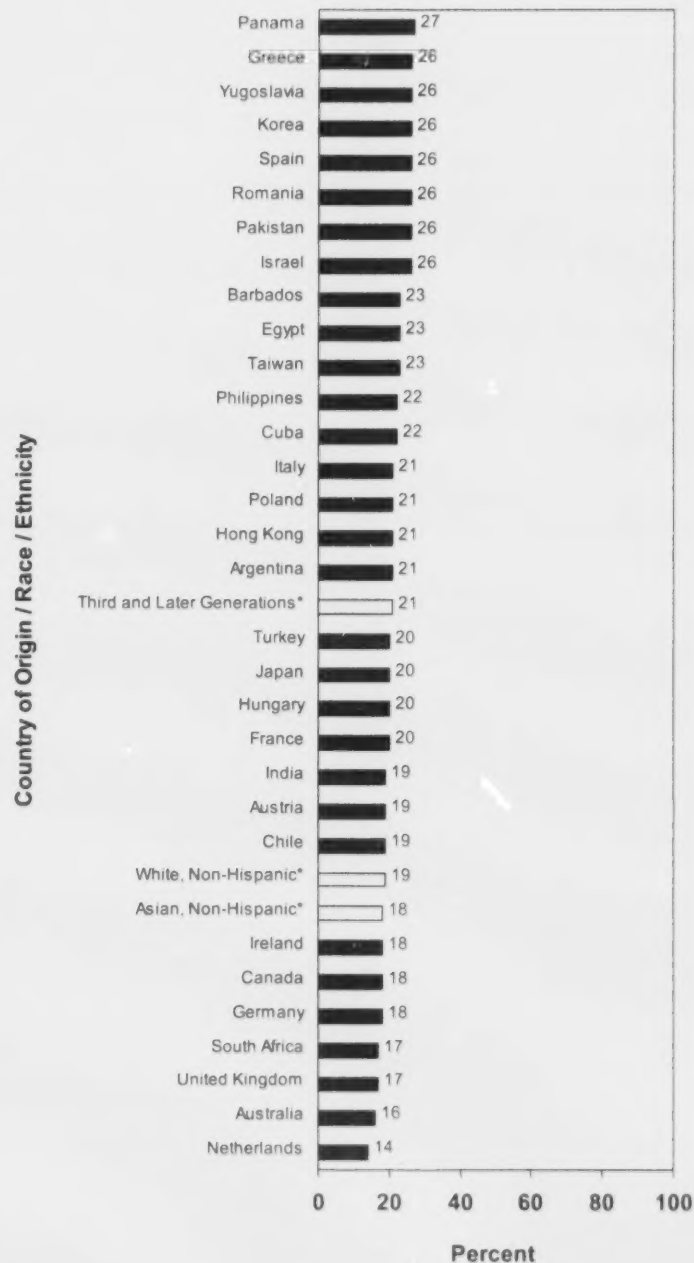
* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 20 (Part 2)

Percent with Fathers Not Working Full-Time, Year-Round, Among those with Fathers in the Home, for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

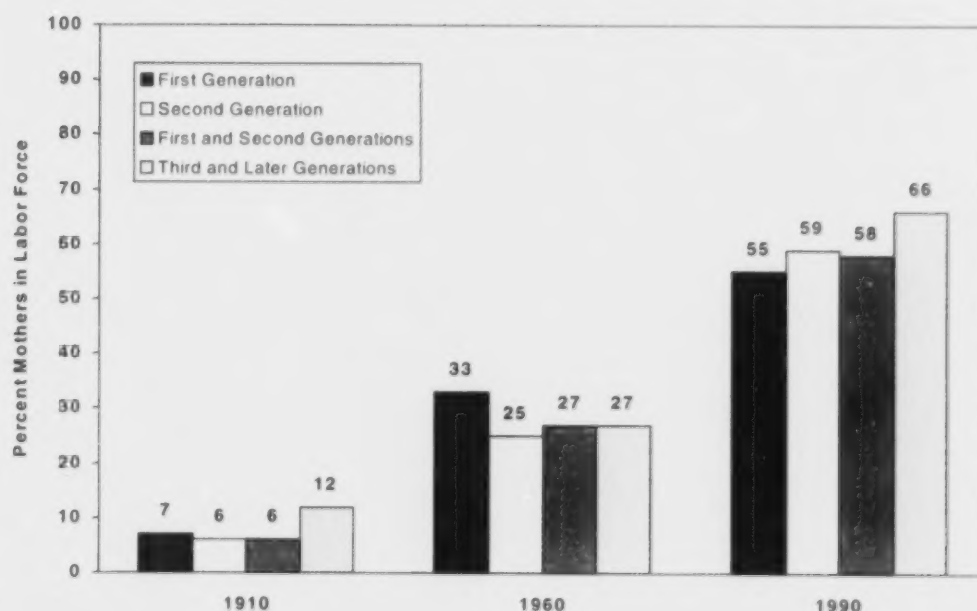
Source: Table A and Hernandez and Darke, 1999.

Although children in immigrant families from an additional 16 countries in 1990 had very high proportions of fathers who did not work full-time year-round, children from most of these 16 countries had two advantages compared to those of children from the 12 very high poverty countries of origin (Table A). Most did not have high proportions with very low parental educational attainments, and most had at least one person in the household, no doubt often the parent, who spoke English exclusively or very well; thus very high poverty rates for children in immigrant families tend to occur among children from countries with very low parental educational attainments (8 years of schooling or less), fathers who cannot find full-time year-around work, and parents who do not speak English exclusively or very well (Table A). These results suggest that the combination of very limited father's educational attainments and linguistic isolation of the household are key factors which make it difficult for fathers in immigrant families to obtain full-time year-round work that pays well enough to lift the family out of poverty.

Of course, many mothers also work for pay, contributing to family income. Among children with mothers in the home, historic trends in mother's labor force participation have been broadly similar for first- and second-generation children and for third- and later-generation children, rising from 6 and 12 percent, respectively, in 1910, to 27 percent in 1960, to 58 and 66 percent, respectively, in 1990 (Figure 21). Full-time year-round employment rates for mothers have also been similar, rising from 9 percent for children in immigrant families and third- and later-generation children in 1960 to 28 and 31 percent, respectively, in 1990 (Figure 22 and Table A).

Figure 21

Percent with Mothers in the Labor Force, Among Those with Mothers in the Home, for First-, Second-, and Third-and-Later-Generation Children: 1910, 1960, and 1990

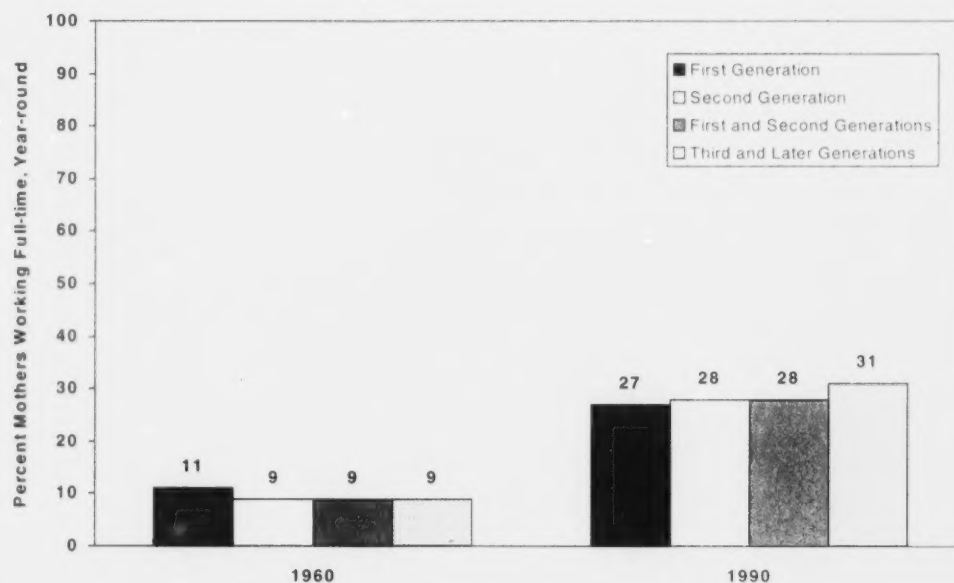


Note: See Technical Appendix for description of variables.

Source: Tables A and B, and calculated from 1910 Census and 1960 Census IPUMS files.

Figure 22

Percent with Mothers Working Full-time, Year-round, Among Those with Mothers in the Home, for First-, Second-and Third-and-Later-Generation Children: 1960 and 1990



Note: See Technical Appendix for description of variables.

Source: Tables A and B, and calculated from 1960 Census IPUMS file.

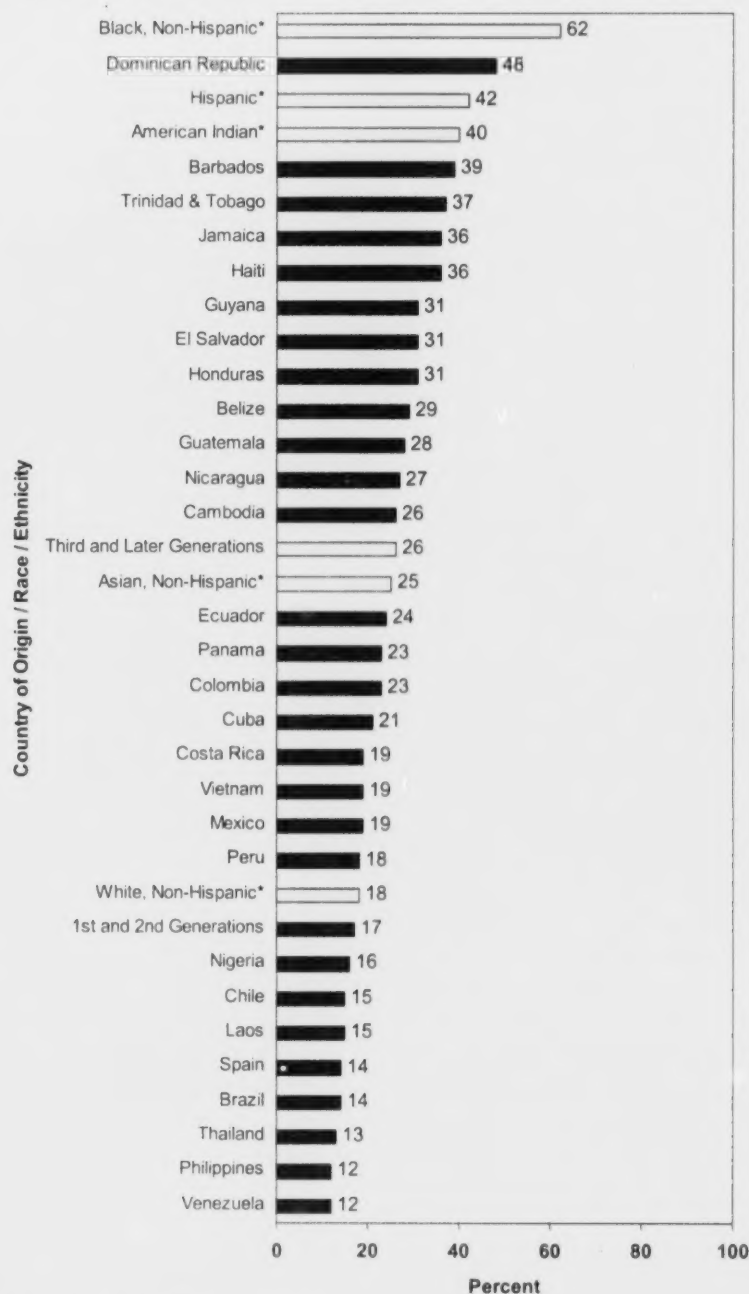
As of 1990, of the 12 countries of origin with high proportions (50 percent or more) of first- and second-generation children with mothers who are not in the labor force, 7 had high proportions (68 to 80 percent) with fathers working full-time year-round (Table A). Children in immigrant families from the remaining 5 countries were among the 12 with very high poverty rates, and they had comparatively high proportions with fathers not working full-time year-round (38 to 68 percent), but they also had high proportions with mothers not graduating from high school (55 to 76 percent), and 4 had high proportions with 5 or more siblings in the home (19 to 42 percent). This pattern suggests that among mothers with very low educational attainments, large family size may often be inconsistent with mother's employment outside the home, perhaps because of a trade-off between mothers' work and providing care for children in the home.

ONE-PARENT FAMILIES

The proportion living with only one parent was smaller for the second than for the first generation overall, and both were less than for the third and later generations of children. For most specific countries of origin the proportion for the second generation was equal to or smaller than the first generation (Figures 23 and 24). Among most countries of origin for which estimates can be calculated in 1990, third- and later-generation children by country origin were more likely than first- and second-generation children from the same country to live with only one parent (Figure 23 and Tables B and B) (Hernandez and Darke, 1999). Third- and later-generation children from most of these countries were at least twice as likely as third- and later-generation non-Hispanic whites (at 18 percent) to live in one-parent families.

Figure 23 (Part 1)

Percent in One-Parent Families, among Those Living with at Least One Parent, for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 23 (Part 2)

Percent in One-Parent Families, among Those Living with at Least One Parent, for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



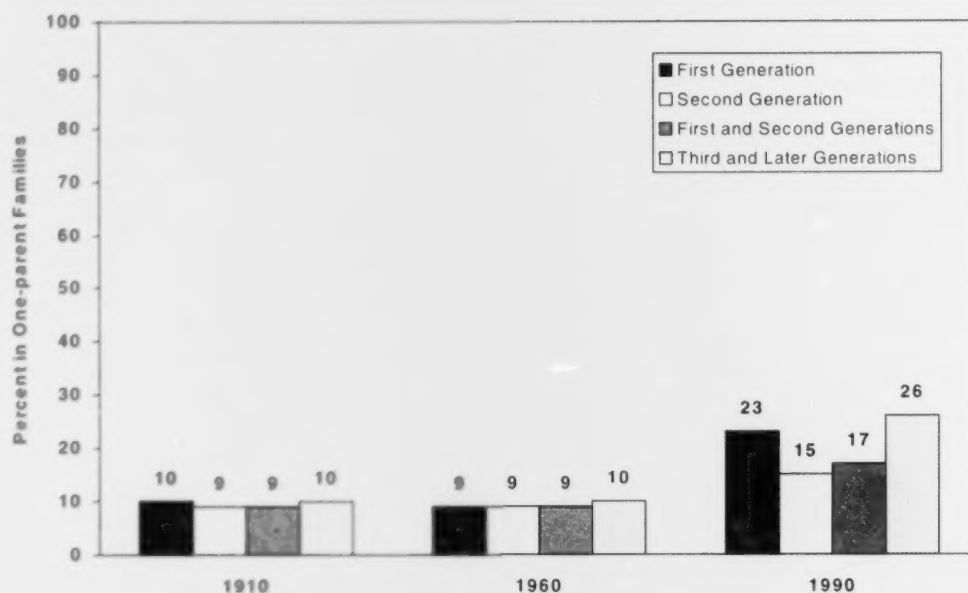
* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 24

Percent in One-parent Families, Among Those Living with at Least One Parent, for First-, Second-, and Third-and-Later-Generation Children: 1910, 1960, and 1990



Note: See Technical Appendix for description of variables.

Source: Tables A and B, and calculated from 1910 Census and 1960 Census IPUMS files.

Focusing on first- and second-generation children from the 12 countries of origin with very high poverty rates, those from Cambodia and the 6 Central American and Caribbean countries were substantially more likely to live in one-parent families (26 to 48 percent) than third- and later-generation white non-Hispanic children (17 percent) (Figure 23). Children from these countries tended to have smaller proportions with 5 or more siblings in the home than those high poverty countries with higher proportions in two-parent families, and they tended to have higher proportions with mothers in the labor force; thus, children in immigrant families from the 12 countries of origin with very high poverty rates in 1990 tended to live in families with a large number of siblings and comparatively few working mothers, or they tended to live in one-parent families, but not both. Overall, nearly all the countries of origin with high proportions of first- and second-generation children living in one-parent families were Caribbean islands or in Central America.

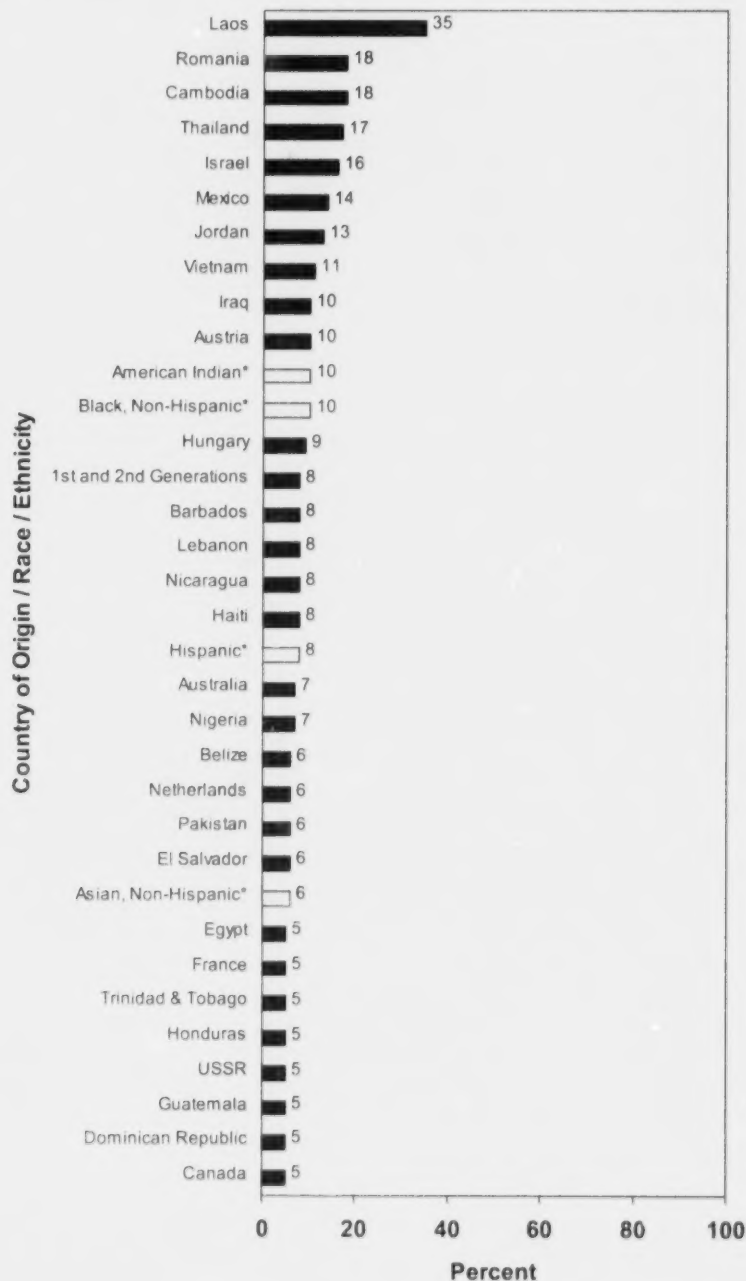
First-, second-, and third- and later-generation children in 1960 were, overall, about equally likely to live in a one-parent family (9 to 10 percent). First-generation children from Mexico, Central America, and Caribbean islands were, however, substantially more likely to live in one-parent families (16 to 17), although the differences disappear for children from Mexico and Central America by the second generation. A very large, one-fourth of third- and later-generation black children lived in one-parent families in 1960. In 1910, too, first-, second-, and third- and later-generation children were about equally likely to live in one-parent families, although third- and later-generation black children were substantially more likely than others to live in one-parent families, at 19 percent versus 8 to 10 percent.

FAMILIES WITH MANY SIBLINGS

While the proportion of children living in one-parent families increased, sometimes dramatically, from the second to the third generation, the proportion of children living in a family with a large number of siblings declined consistently across generations (Hernandez and Darke, 1999). Specifically, the proportion of children living in families with 5 or more siblings in 1990 dropped from 17 to 9 to 5 percent, respectively, between the first, second, and third and later generations (Figure 23 and 24, and Tables A and B). For most specific countries of origin, not only did the second generation in 1990 have smaller proportions in large families than first-generation children from the same countries, the proportions usually were similar to third- and later-generation non-Hispanic white children, at 10 percent or less for the second generation. Risk levels for third- and later-generation children also were similar, overall, to third- and later-generation non-Hispanic whites.

Figure 25 (Part 1)

Percent in Families with Five or More Siblings for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 25 (Part 2)

Percent in Families with Five or More Siblings for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



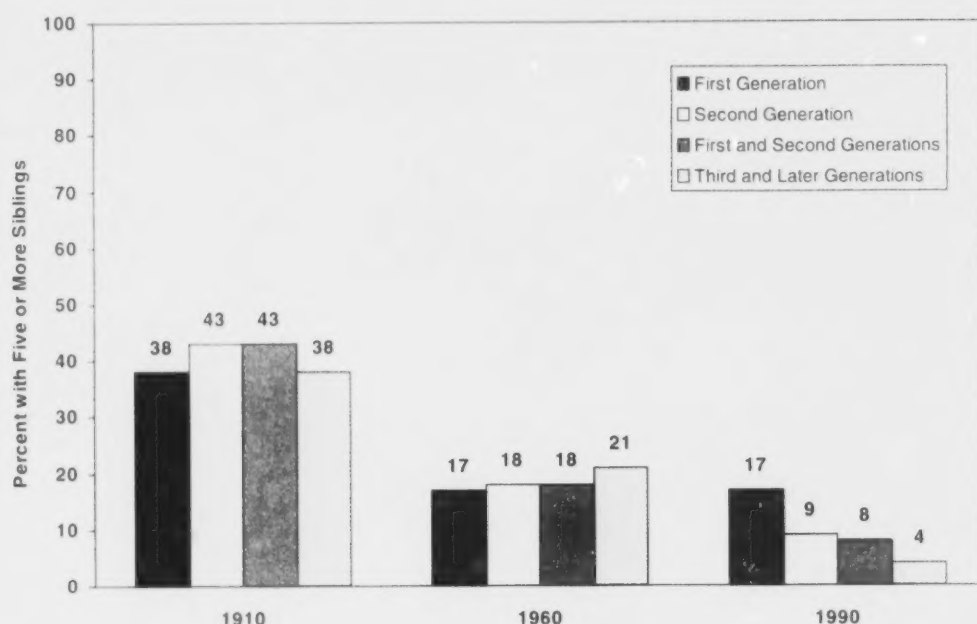
* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 26

Percent in Families with Five or More Siblings for First-, Second-, and Third- and-Later-Generation Children: 1910, 1960, and 1990



Note: See Technical Appendix for description of variables.

Source: Tables A and B, and calculated from 1910 Census and 1960 Census IPUMS files.

Nonetheless, among children in immigrant families from the 12 countries of origin with very high poverty rates, 4 of the 5 that did not have high proportions in one-parent families (excluding only the former Soviet Union) did have high proportions with large numbers of siblings, and children in immigrant families from 3 countries experienced elevated proportions living with one-parent only and with a large number of siblings (Cambodia, Haiti, and Nicaragua) (Figure 25 and Table A).

In 1960 and 1910, first-, second-, and later-generation children were about equally likely to live in families with many siblings, at 17 to 21 percent in 1960, and 38 to 43 percent in 1910 (Figure 26). In 1910 and 1960, respectively, an extraordinary 51 and 58 percent of first-generation children with Mexican origins lived in large families, but the proportion declined for the second generation from 61 to 57 percent between 1910 and 1960, and for the third and later generations from 59 to 40 percent. Meanwhile the proportion of black children in families with 5 or more siblings remained about constant at 45 to 48 percent.

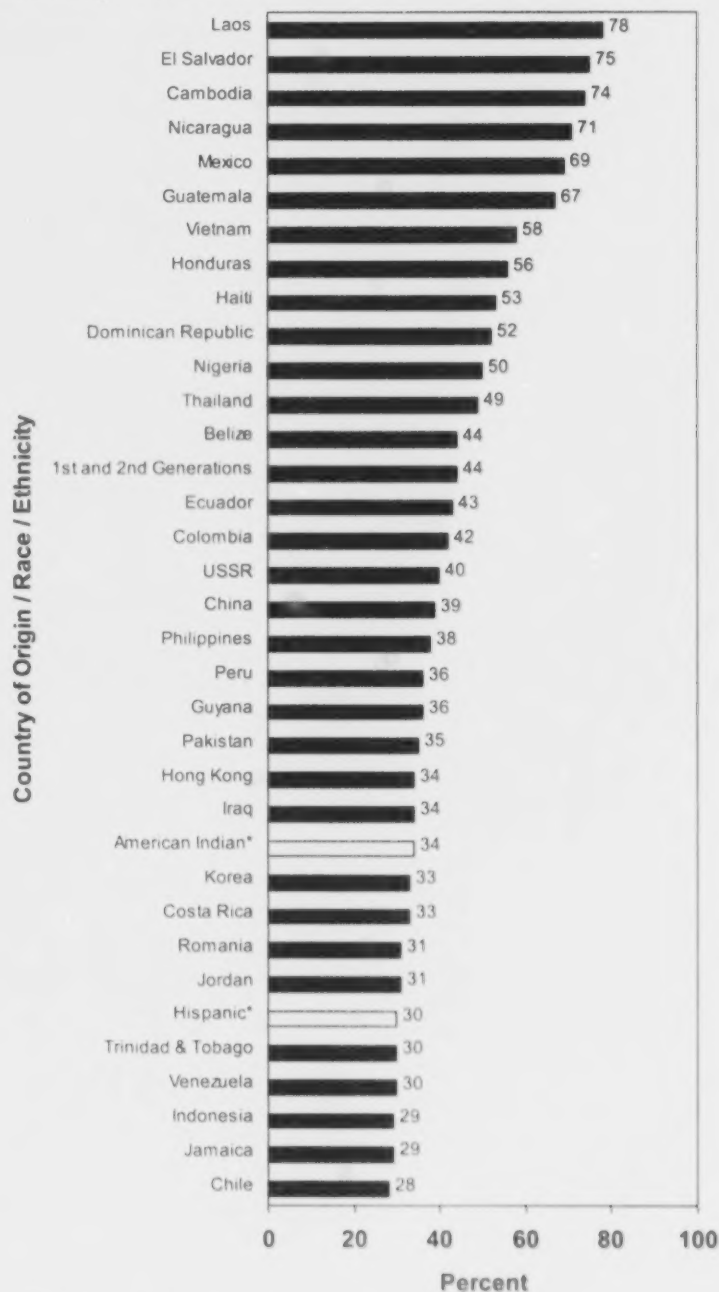
By 1990, the proportions with 5 or more siblings were much smaller for all groups. Among first-, second- and third-, and later-generation Mexican-origin children, respectively, 29, 16, and 8 percent lived in families with 5 or more siblings; thus, among third- and later-generation children, those of Mexican origin were about as likely as blacks to live in large families, at 8 and 9 percent, respectively, and somewhat more likely than non-Hispanic whites to live in such families (4 percent).

OVERCROWDED HOUSING

Only 12 percent of third- and later-generation children lived in overcrowded housing with more than one person per room in 1990, compared to 38 percent for the second generation, and 62 percent for the first generation (Figure 28) (Hernandez and Darke, 1999). Children in immigrant families from most specific countries of origin in 1990 also had high proportions living in overcrowded housing, although children in immigrant families from the 12 countries with very high poverty were much more likely than most to live in such conditions (Figure 27). For children from most of these 12 countries, declines in overcrowding are substantial between the first and second, and, where measurable, between the second and the third and later generations (Tables A-2 and A-3). But third and higher generations continue to experience high levels of overcrowding, especially Mexican-origin children at an extraordinary 31 percent, which is similar to the 26 and 33 percent experienced, respectively, by black and American Indian children, and 5 times greater than the 7 percent experienced by third- and later-generation non-Hispanic white children.

Figure 27 (Part 1)

Percent Living in Overcrowded Housing for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 27 (Part 2)

Percent Living in Overcrowded Housing for First- and Second-Generation Children by Country of Origin, and Third-and-Later-Generation Children by Race and Ethnicity: 1990



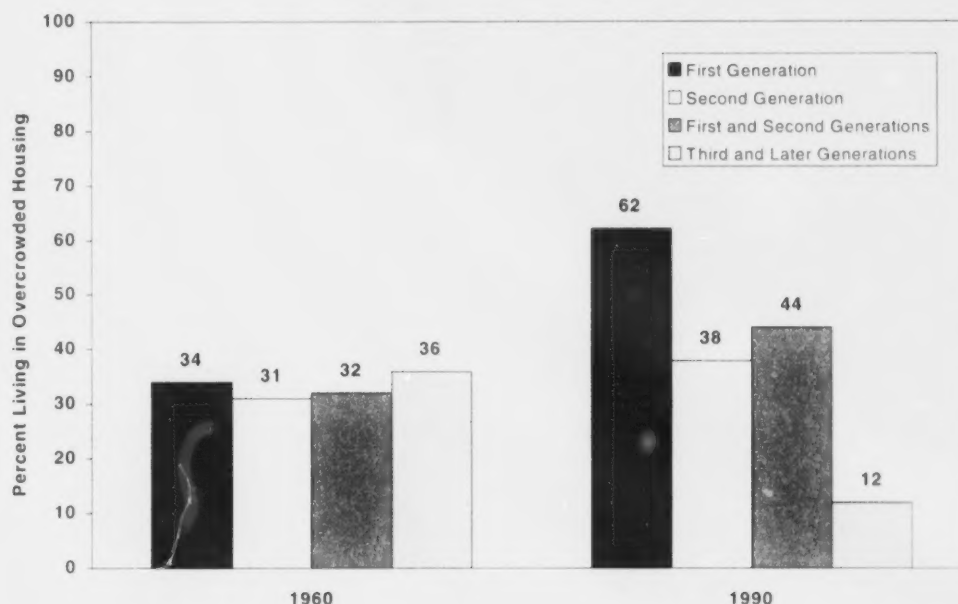
* Third-and-later-generation children shaded lightly.

Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 28

Percent Living in Overcrowded Housing for First-, Second, and Third-and-Later-Generation Children: 1960 and 1990



Note: See Technical Appendix for description of variables.

Source: Tables A and B, and calculated from 1960 Census IPUMS file.

Overall levels of overcrowding were much higher among children in 1960 than in 1990, but they were about equal for first-, second-, and third- and later-generation children at 31-36 percent (Figure 28); however, 75 percent of first- and second-generation Mexican-origin children, and 69-70 percent of black children and third- and higher-generation children of Mexican origin lived in crowded conditions in 1960.

POTENTIAL RISK FACTORS SPECIFIC TO CHILDREN IN IMMIGRANT FAMILIES

First- and second-generation children with origins in countries where English is not the native language, or is not widely taught, may be at special risk, compared to children in third- and later-generation children, because they may not themselves speak English well, or they may live with parents who do not speak English well. A lack of English fluency can limit effective communication and functioning in health facilities, schools, or other settings that provide essential resources to children and their families. U.S. citizens have easier access to resources than do non-citizens, and various states differ enormously in economic context and resources; thus, the citizenship status of children in immigrant families and their parents, as well as the states in which they settle, may have important implications for child well-being and development.

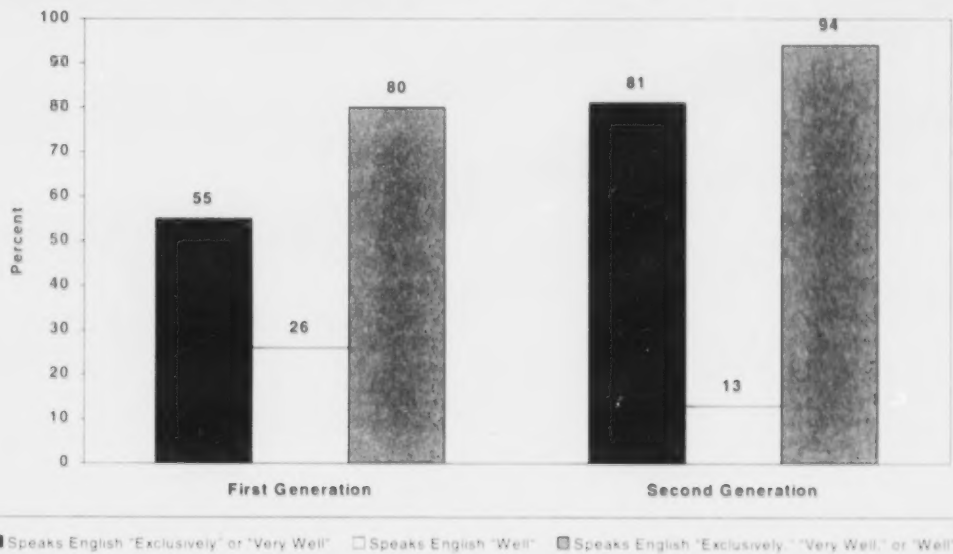
ENGLISH LANGUAGE FLUENCY

At least 60 percent of children in immigrant families from most countries of origin spoke a language other than English at home in 1990 (Hernandez and Darke, 1999). The exceptions were English-speaking countries of origin, as well as Austria, Germany, Netherlands, Nigeria, and South Africa. But for only 13 countries of origin did the proportion of children in immigrant families not speaking English exclusively or very well reach 30 percent or more (Table A). Eleven of these countries are among the 12 with children who have the highest poverty rates (excluding only Haiti), and the remaining two were China and Hong Kong.

Generational differences are large, however, as the proportion who speak English exclusively or very well rises from only 55 percent for the first generation to 81 percent for the second generation (Figures 29, 30, and 31); thus, by the second generation the vast majority of children speak English exclusively or very well. However, an additional 26 percent of first-generation children and 13 percent of second-generation children are reported as speaking English well; thus, the proportion speaking English well, very well, or exclusively is quite high for both the first and second generations, at 80 and 94 percent, respectively. The proportion speaking English exclusively or very well among children in immigrant families from 11 of the 12 countries with very high poverty rates is in the range of 35 to 53 percent for the first generation, but this rises to large majorities for 10 of 12 countries (excluding Cambodia and Laos) to 65 to 91 percent for the second generation.

Figure 29

Percent Speaking English "Exclusively" or "Very Well" or Speaking English "Well" for First- and Second-Generation Children: 1990

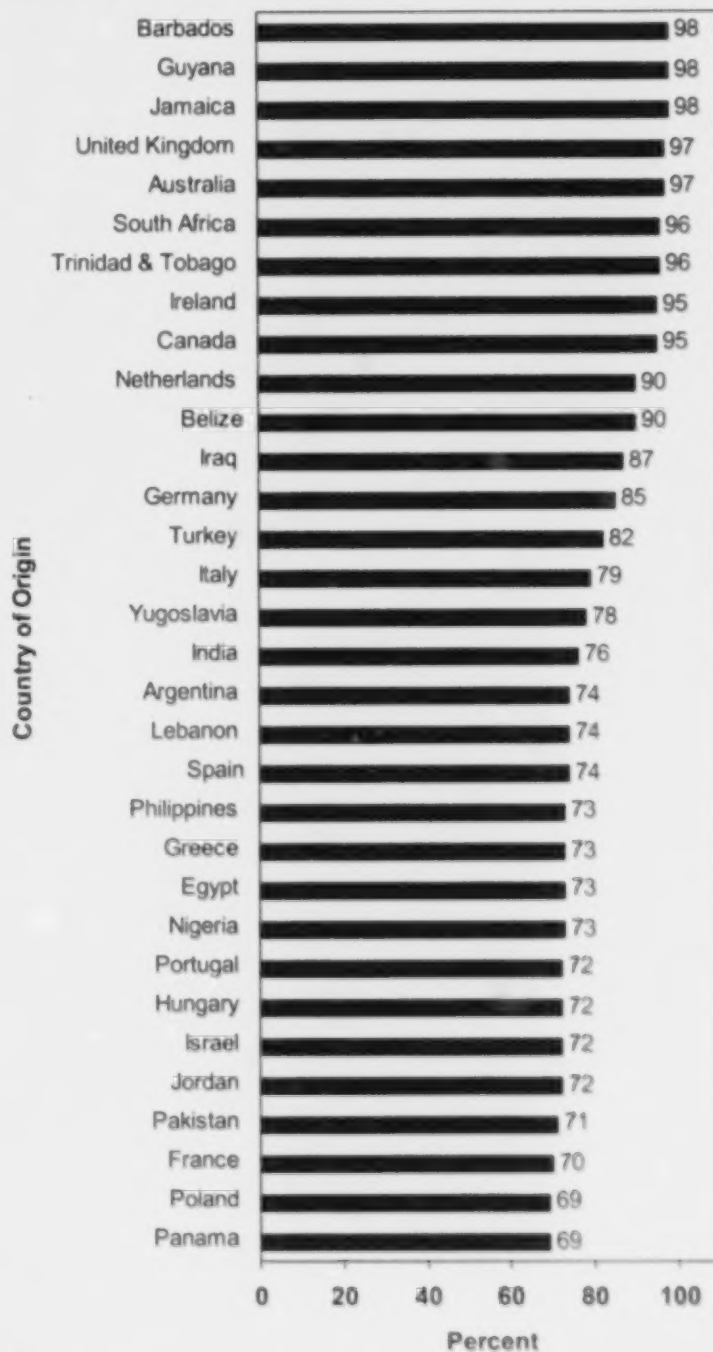


Note: See Technical Appendix for description of variables.

Source: Table B and calculated from 1990 Census PUMS file.

Figure 30 (Part 1)

Percent of First Generation Children Speaking English "Exclusively" or "Very Well" by Country of Origin: 1990

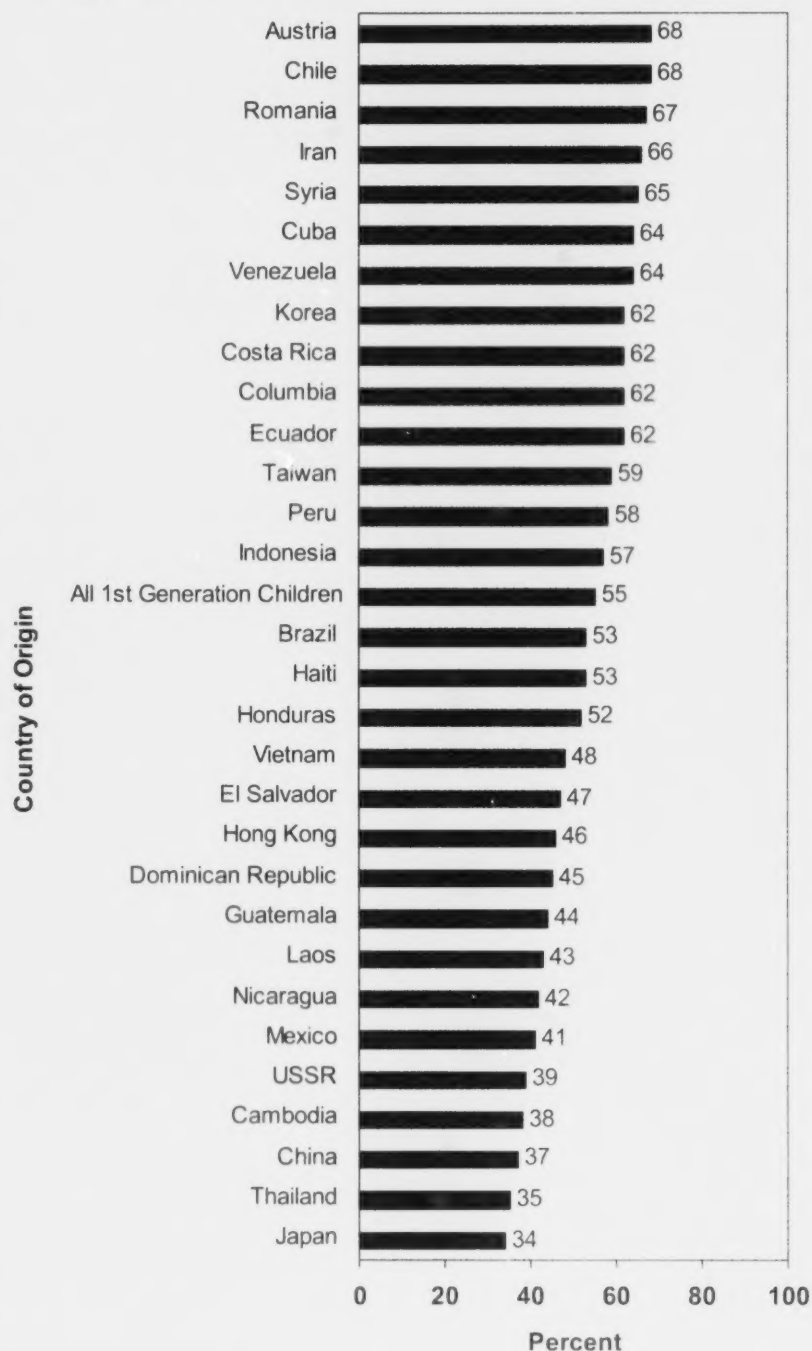


Note: See Technical Appendix for description of variables.

Source: Table B and Hernandez and Darke, 1999.

Figure 30 (Part 1)

Percent of First Generation Children Speaking English "Exclusively" or "Very Well" by Country of Origin: 1990

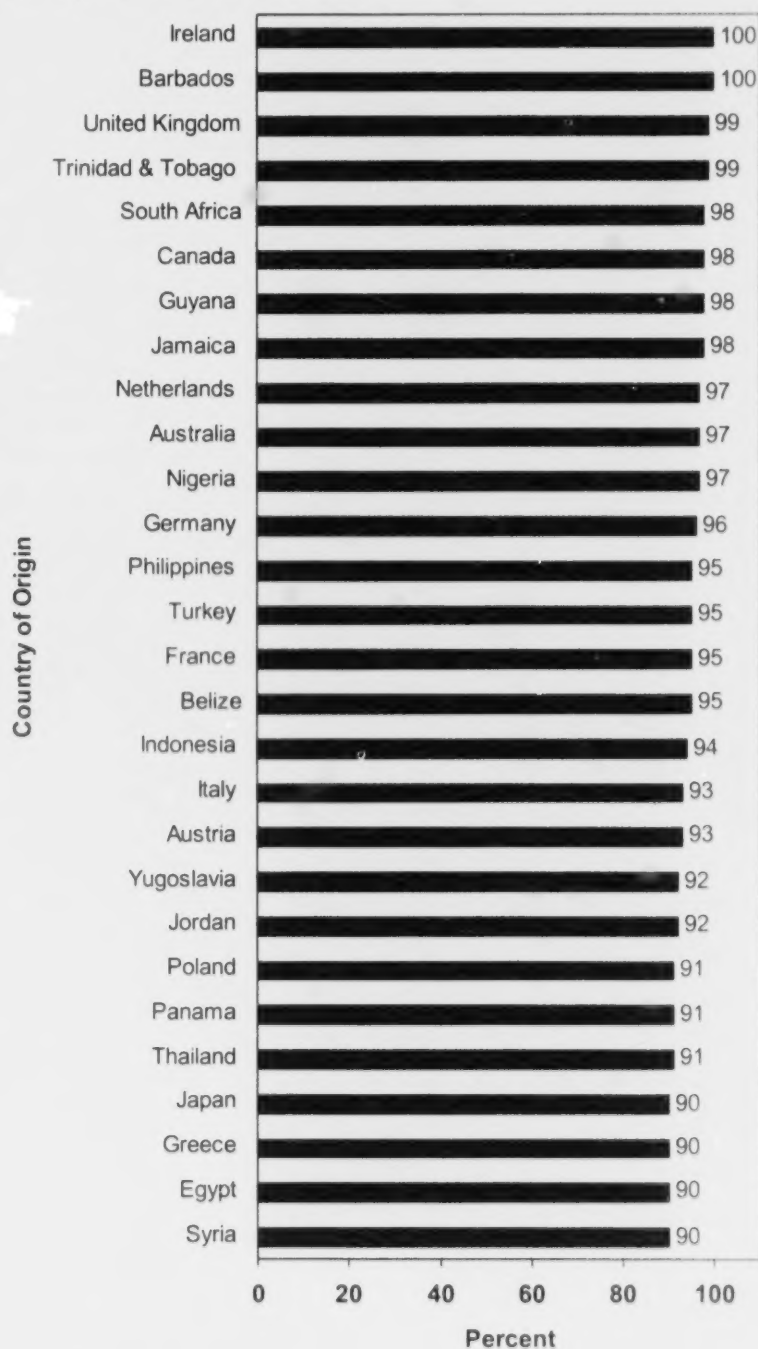


Note: See Technical Appendix for description of variables.

Source: Table B and Hernandez and Darke, 1999.

Figure 31 (Part 1)

Percent of Second Generation Children Speaking English "Exclusively" or "Very Well" by Country of Origin: 1990



Note: See Technical Appendix for description of variables.

Source: Table B and Hernandez and Darke, 1999.

Figure 31 (Part 1)

Percent of Second Generation Children Speaking English "Exclusively" or "Very Well" by Country of Origin: 1990



Note: See Technical Appendix for description of variables.

Source: Table B and Hernandez and Darke, 1999.

Lack of English fluency may not pose enormous difficulties for immigrants in communities that have a large number of residents from the home country. But it does isolate immigrants from the broader, mainstream society. The Census Bureau defines a linguistically isolated household as one in which no person age 14 years or over speaks English either exclusively or very well. Among children in immigrant families in 1990, 26 percent lived in linguistically isolated households (Figure 32). But among children from each of the 12 countries of origin with children at high levels of socioeconomic risk, the proportions in linguistically isolated households were 31-38 percent for 3 countries, 41-46 percent for 7 countries, and 60 percent for 2 (Laos and Cambodia). Children from only four additional countries had 30 percent or more in linguistically isolated households, at 41, 35, 36, and 31 percent, respectively, for China, Hong Kong, Taiwan, and Colombia.

No language information was collected in the 1960 census, but historical changes since the beginning of the century can be assessed by comparing "mother tongue" data for 1910 to "language spoken at home" in 1990. In 1910, the proportions of children in immigrant families for whom English was not the "mother tongue" for either the father or the mother were 84 to 85 percent, and for 79 percent of children in immigrant families with two parents in the home, neither parent had English as a mother tongue. In 1990, the proportions of children in immigrant families who lived with a mother or father who did not speak English at home were 76 to 78 percent. In households with both mother and father at home, the proportion was 70 percent. Although these measure of language are not identical, they are similar, and the similarity of the results for 1910 and 1990 suggests that historical differences in the proportion of children in immigrant families with parents speaking or not speaking English were about the same at the beginning and end of the century.

CITIZENSHIP

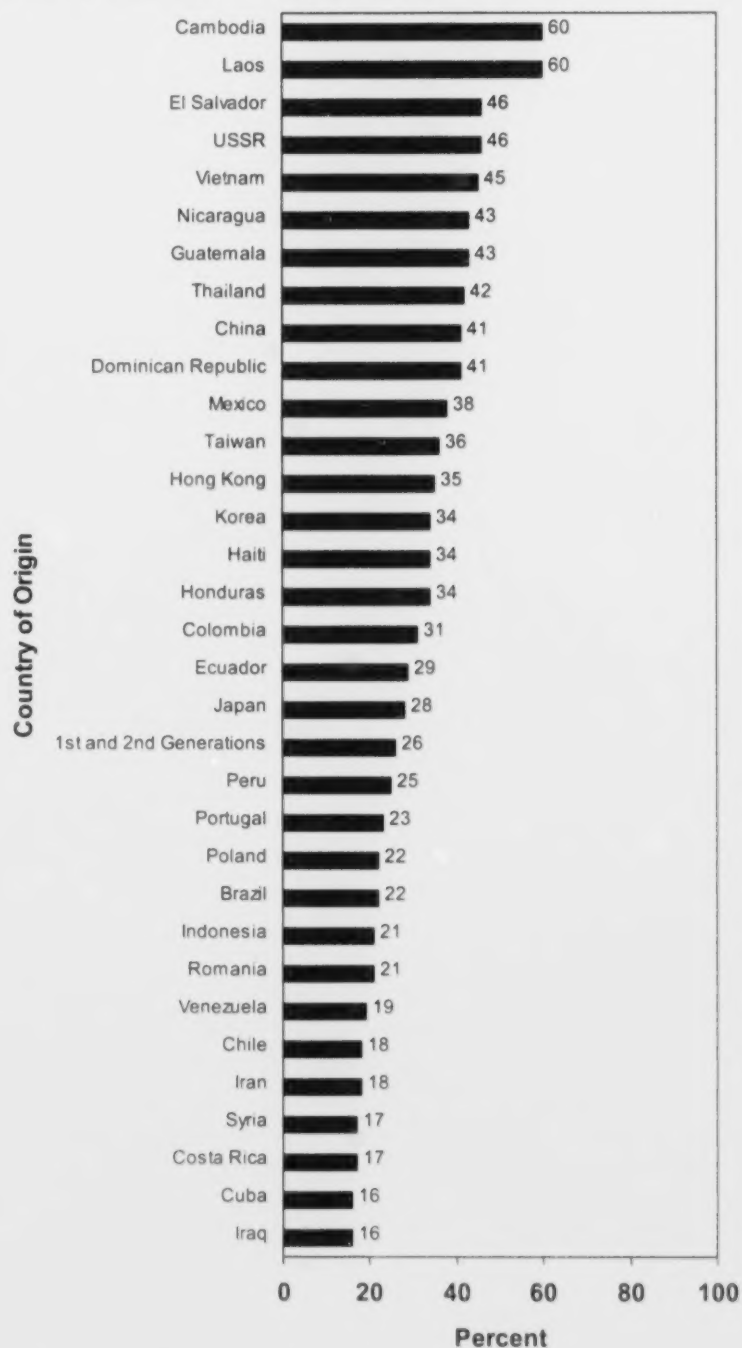
Of the 8.4 million children in immigrant families in 1990, 75 percent were citizens by birth, 4 percent were naturalized citizens, and 21 percent (1.7 million) were not citizens (Hernandez and Darke, 1999). Of the citizen children, about 54 percent had at least one parent in the home who was not a citizen; thus, approximately two-thirds of children in immigrant families in 1990 were either themselves not a citizen or lived with a noncitizen parent.

In the 1990 census, the official poverty rate for noncitizen children was 34 percent, and among citizen children with at least one noncitizen parent the proportion was 23 percent. For all children in immigrant families the proportion was 27 percent. Children in immigrant families from 9 of the 12 countries of origin with high levels of poverty were especially likely to be noncitizens, at 29 percent or more. The proportion was 21 to 23 percent for the remaining high-risk countries (Dominican Republic, Mexico, Haiti). Three additional countries had 29 percent or more of children who were noncitizens and poverty rates greater than among third- and later-generation non-Hispanic whites (Venezuela, Romania, Guyana). Children in immigrant families from only two additional countries had such high proportions who were noncitizens, Japan and South Africa, at 31 and 30 percent, respectively, but they had very low poverty rates.

For children in immigrant families with origins in 2 of the 12 countries with high poverty rates, 62 or 63 percent were not citizens or had at least one parent in the home who was not a citizen, and this rose to 73 to 75 percent for 5 of these countries and 81 to 89 percent for the remaining 5 countries. The figure was 50 percent or more for 18 of the other 26 countries of origin with child poverty rates at least as high as for third- and later-generation non-Hispanic whites (11 percent); thus children in immigrant families from countries of origin with high poverty rates also, often, are not citizens or have at least one parent who is not a citizen.

Figure 32 (Part 1)

Percent in Linguistically Isolated Households for First- and Second-Generation Children by Country of Origin: 1990

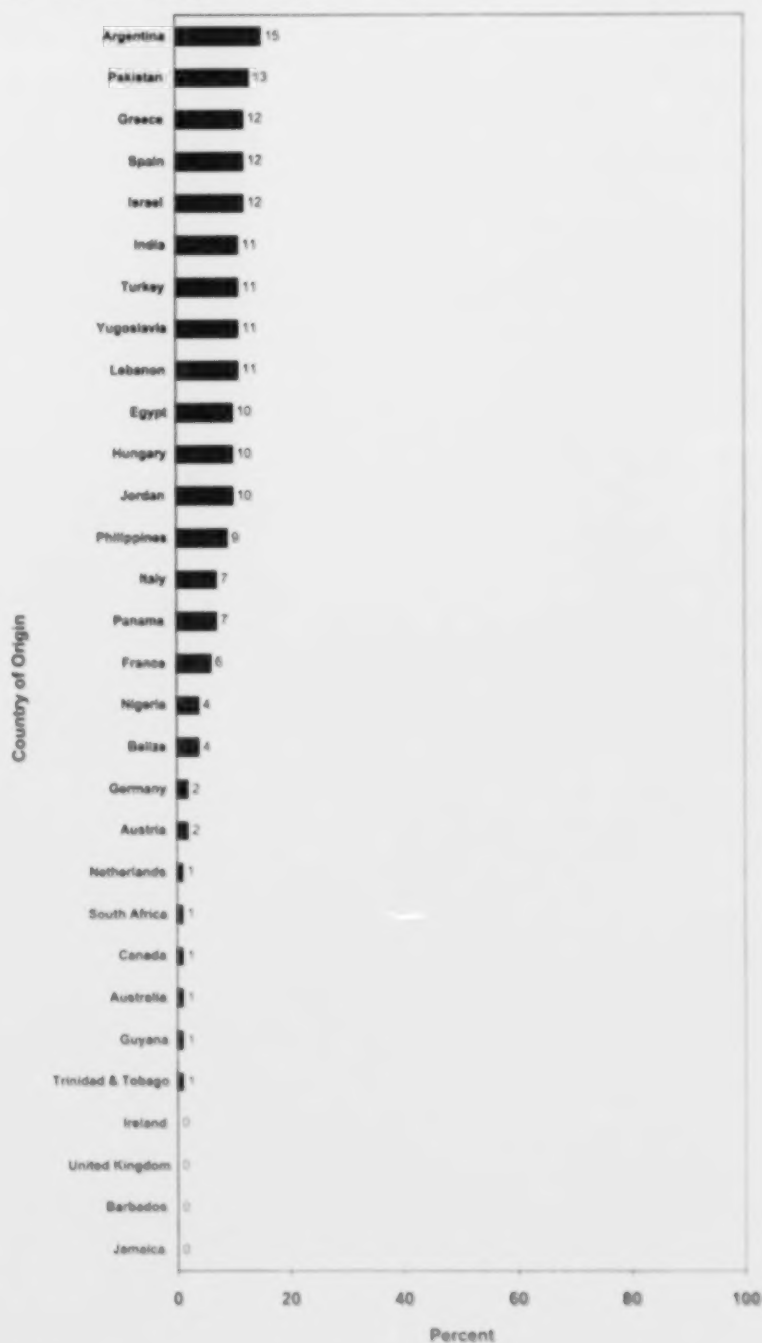


Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

Figure 32 (Part 2)

Percent in Linguistically Isolated Households for First- and Second-Generation Children by Country of Origin: 1990



Note: See Technical Appendix for description of variables.

Source: Table A and Hernandez and Darke, 1999.

STATE OF RESIDENCE

California accounted for 35 percent of all children in immigrant families in 1990, followed by New York, Texas, Florida, Illinois, and New Jersey, for a total of 74 percent in six states (Figure 33) (Hernandez, 1999). At least 2 percent of children in immigrant families lived in each of an additional 6 states (Arizona, Massachusetts, Michigan, Pennsylvania, Virginia, Washington). Three less populous states (Figure 34) also had comparatively high proportions (higher than the national average) of all children who were children in immigrant families (Hawaii, Rhode Island, and Nevada). These 15 states accounted for 84 percent of all children in immigrant families.

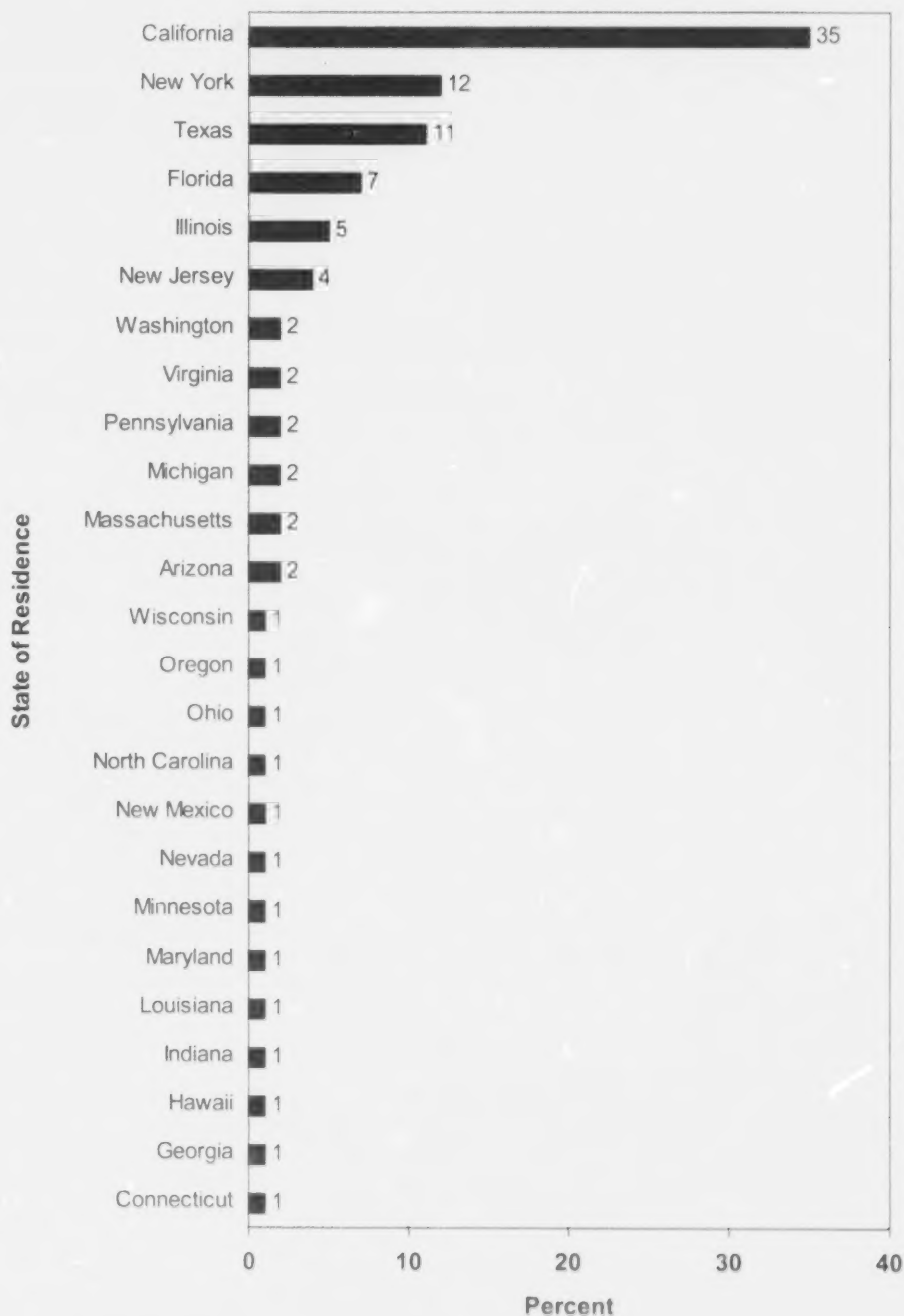
PHYSICAL HEALTH

The physical health of children and youth in immigrant families encompasses a wide range of issues. Because few surveys or health monitoring systems in the United States distinguish among first-, second-, and third- and later-generation children, scientific evidence is limited; nevertheless, available evidence along several important dimensions suggests that children and adolescents in immigrant families experience better health than do third- and later-generation children and youth, a finding that is counterintuitive in light of the racial and ethnic minority status, overall lower socioeconomic status, and higher poverty rates that characterize children in immigrant families.

Evidence on this issue is patchy, focusing on some immigrant groups and some age groups and frequently relying on parental or adolescent reports rather than direct medical examinations, but the research that exists is quite consistent; however, the relative advantage of children in immigrant families appears to decline with length of time in the United States and from one generation to the next. Moreover, immigrant children may be at particular risk for selected health conditions including parasitic infections, some of which may be unfamiliar to many U.S. physicians and most of which, if left untreated, can lead to serious conditions. Care must be taken not to overgeneralize, however, because children and youth from various countries of origin differ greatly, and available evidence is often for children from only a few countries of origin.

Figure 33

Percent of First- and Second-Generation Children Living in Specified States: 1990 (for states including at least 1 percent of these children)

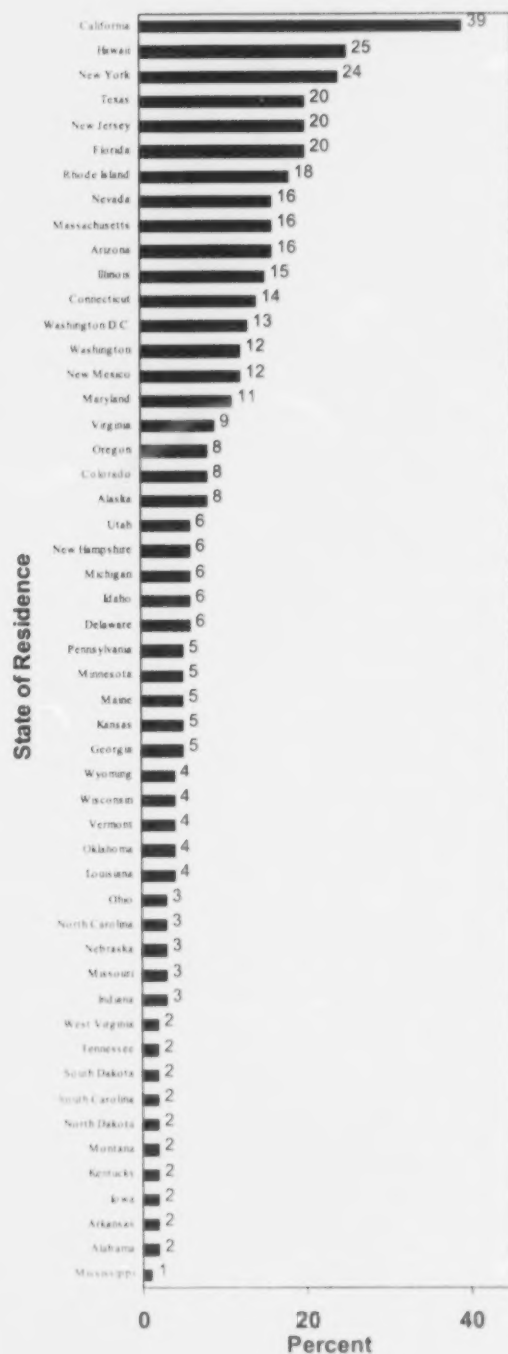


Note: See Technical Appendix for description of variables.

Source: Hernandez and Darke, 1999.

Figure 34

Percent of Total State Child Population Who Are First- or Second-Generation: 1990



Note: See Technical Appendix for description of variables.

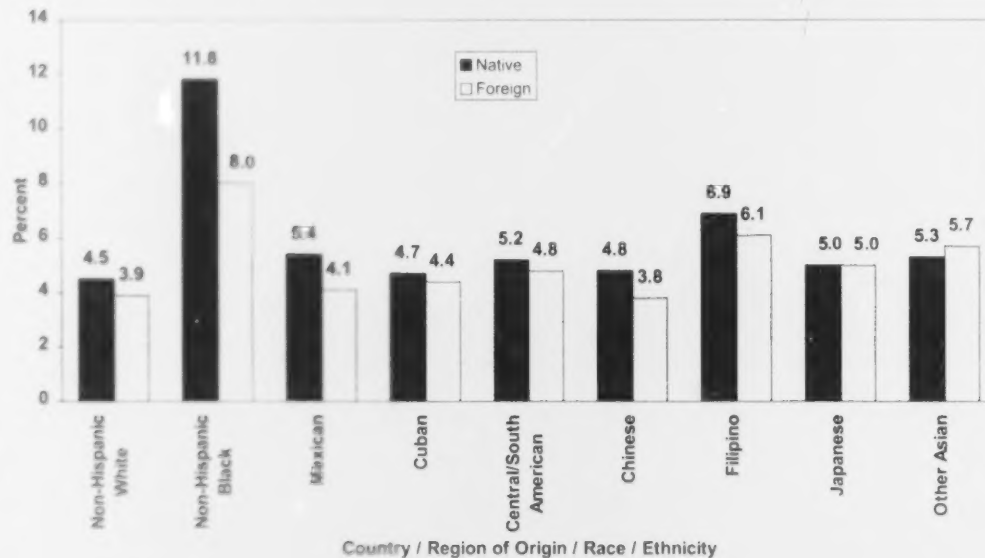
Source: Hernandez and Darke, 1999.

INFANT BIRTHWEIGHT AND MORTALITY

Two commonly used indicators of infant health are the rate of low birthweight (less than 2500 grams) and infant mortality (deaths in the first year of life) (Institute of Medicine, 1985; U.S. Department of Health and Human Services, 1986). Significantly lower rates for these two indicators have been found among the immigrant population than among native-born mothers for the Mexican-American population, despite the lower socioeconomic status of the immigrants (Guendelman, 1995; Guendelman and English, 1995; Guendelman et al. 1995; Markides and Coreil, 1986; Williams et al., 1986; Scribner and Dwyer, 1989; Ventura, 1983; 1984). Research across immigrant groups based on single births in the 1989-91 Linked Birth/Infant Death Data Sets (Landale et al., 1998) found similar patterns for other ethnic groups. The nativity differentials in birthweight and infant mortality in these groups are often smaller than they are for Mexican Americans, however, and are sometimes consistent with expectations based on socioeconomic differences between immigrant and native-born women (Figures 35 and 36). Differences in rates of cigarette smoking are one important determinant of the differences between immigrant and native-born women.

Figure 35

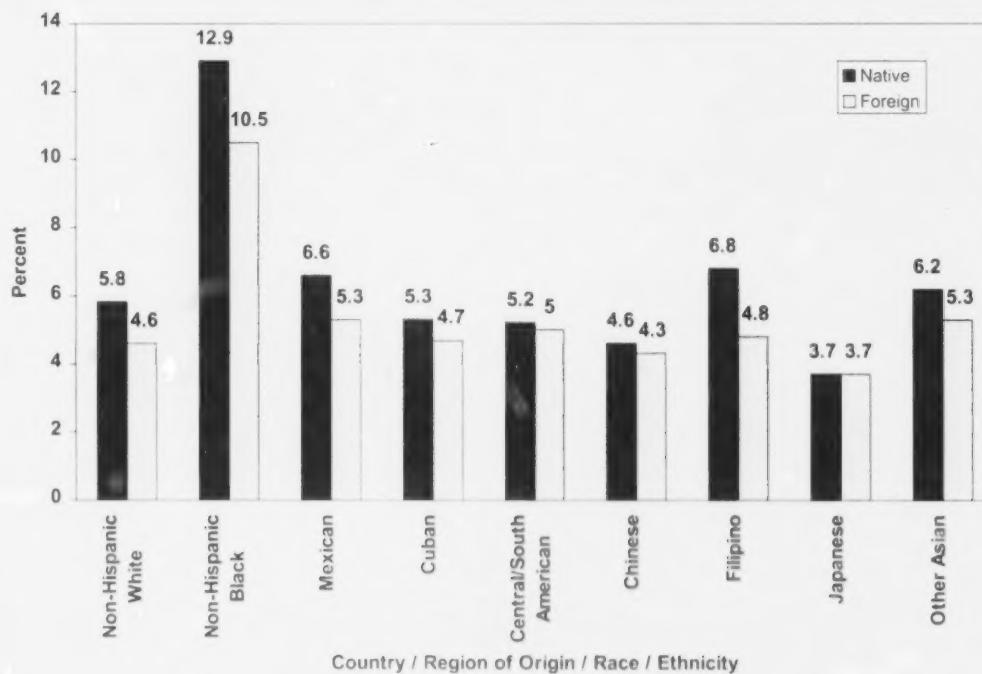
Percent with Low Birth Weights among Births to Immigrant and Native-Born Women by Country or Region of Origin, and Race or Ethnicity: 1990



Source: Landale, Oropesa, and Gorman, 1999.

Figure 36

Infant Mortality Rate for Children of Immigrant and Native-Born Women
by Country or Region of Origin, and Race or Ethnicity: 1990



Source: Landale, Oropesa, and Gorman, 1999.

CHILD AND ADOLESCENT HEALTH

Analyses of the 1994 National Health Interview Survey (NHIS) find from parent reports of children in immigrant families that their children experience fewer acute and chronic health problems compared to third- and later-generation children, including infectious and parasitic diseases; acute ear infections; injuries; chronic respiratory conditions such as bronchitis, asthma, and hay fever; chronic hearing, speech, and deformity impairments (Table 3) (Brown et al 1998; Hernandez and Charney, 1998). Additional estimates for children of Mexican origin using the 1996 National Health and Nutrition Examination Survey (NHANES III), which also rely on parent reporting, similarly indicate that noncitizen children and citizen children with foreign-born parent have fewer injuries and poisonings and fewer major activity limitations than third- and later-generation children (Table 4) (Mendoza and Dixon, 1999; Hernandez and Charney, 1998).

Table 3

Percent with Acute and Chronic Conditions During the Year for Children by Immigration Status and Type of Condition: 1994

	Non-Citizen	Citizen in Immigrant Family	Citizen in U.S. Born Family	Total All Children in Age Group
Infections and Parasitic Diseases (acute)				
Common Childhood Diseases	4.4	3.2	4.7	4.8
Intestinal Virus	0	3.7	11	9.7
Viral Infections, Unspecified	0	6.4	16.3	15.1
Other Infections or Parasitic Diseases	4.4	10.2	19.8	16.6
Respiratory Conditions (acute)				
Influenza	4.2	55.8	42.7	46.1
Pneumonia	0	2.8	2.2	2.6
Respiratory Conditions (chronic)				
Chronic Bronchitis	2.8	3.8	6.2	5.8
Asthma	6.5	5.7	6.9	7.3
Hay Fever	4.3	5.3	6.5	6.4
Other Acute Conditions				
Acute Ear Infections	1.8	22.4	30.5	29.5
Acute Injuries	15.1	15.2	27.8	27.4
Chronic Hearing Impairment	0.4	0.5	1.9	1.8
Chronic Speech Impairment	1.9	1	2.2	2.2
Chronic Deformity Impairment	0	0.2	1.4	1.2

Source: Brown et al., 1999.

Table 4

Percent with Selected Reported Health Conditions for First- and Second-Generation Children by Generation and for Third-and-Later-Generation Children by Race and Ethnicity: 1996

Percent with Reported Condition ^a	First Generation Mexican American	Second Generation Mexican American	Third Generation Mexican American	Non-Hispanic African American	Non-Hispanic White	Non-Hispanic Other
Perceived health to be fair or poor as assessed by parent						
< 5 yrs.	23.9 (3.33)	16.8 (1.05)	6.3 (0.83)	4.9 (0.73)	1.8 (0.35)	7.4 (1.25)
6-11 yrs.	27.6 (7.70)	20.0 (2.28)	6.6 (1.43)	6.9 (0.91)	2.0 (0.47)	3.5 (1.36)
12-16 yrs.	28.7 (4.99)	15.4 (2.52)	6.8 (1.63)	7.4 (1.20)	3.5 (0.79)	8.4 (4.25)
Asthma						
< 5 yrs	2.2 (1.20)	5.2 (0.88)	8.1 (1.72)	9.0 (0.75)	5.1 (0.55)	6.6 (1.40)
6-11 yrs	3.8 (2.74)	9.8 (2.71)	15.0 (4.09)	9.4 (1.00)	10.6 (1.41)	12.4 (6.12)
12-16 yrs	3.1 (1.77)	6.6 (1.91)	8.5 (1.92)	12.6 (1.63)	12.8 (1.67)	12.9 (4.59)
Possible active infection on physical examination at time of survey^b						
< 5 yrs.	8.3 (2.68)	9.1 (1.42)	12.3 (1.93)	12.1 (1.74)	7.1 (1.25)	5.1 (1.35)
6-11 yrs.	8.6 (3.66)	5.3 (1.43)	5.9 (1.57)	5.9 (0.94)	5.0 (1.31)	16.0 (6.77)
12-16 yrs.	4.0 (1.13)	2.1 (1.12)	4.7 (1.49)	3.0 (0.83)	4.6 (1.67)	4.4 (3.25)
Ever had anemia						
< 5 yrs	9.7 (2.18)	14.5 (1.09)	11.0 (1.60)	11.2 (1.06)	6.4 (0.67)	10.7 (1.97)
6-11 yrs	9.2 (3.14)	11.7 (2.08)	2.8 (0.93)	7.4 (0.74)	7.2 (1.11)	7.4 (3.00)
12-16 yrs	8.7 (2.64)	7.2 (1.88)	4.3 (1.12)	6.4 (1.17)	8.4 (1.55)	3.6 (2.24)
Past 12 months any accidents, injury, or poisoning						
< 5 yrs	3.7 (1.65)	5.5 (0.58)	10.0 (1.16)	6.3 (0.61)	12.8 (0.89)	7.4 (1.69)
6-11 yrs	4.2 (3.26)	5.0 (1.16)	8.1 (1.95)	7.0 (0.96)	19.3 (2.31)	4.2 (1.92)
12-16 yrs	3.6 (1.58)	7.5 (1.40)	10.7 (2.63)	11.0 (1.15)	18.5 (2.15)	9.7 (3.33)
Condition of Teeth - Fair to Poor						
< 5 yrs.	39.3 (5.10)	26.0 (2.49)	21.0 (1.80)	13.7 (1.37)	6.9 (0.89)	17.3 (2.37)
6-11 yrs.	60.1 (8.15)	42.6 (2.92)	23.5 (3.68)	22.7 (1.52)	12.2 (1.20)	18.4 (4.36)
12-16 yrs.	50.8 (4.65)	36.3 (3.24)	16.4 (1.99)	20.2 (2.05)	11.5 (1.64)	8.6 (3.23)
Problems seeing						
< 5 yrs.	0.2 (0.24)	1.1 (0.35)	0.7 (0.30)	1.8 (0.35)	1.5 (0.34)	1.6 (1.06)
6-11 yrs.	6.8 (2.42)	13.2 (2.42)	7.9 (1.19)	9.8 (1.17)	7.6 (1.07)	4.5 (2.19)
12-16 yrs.	18.8 (2.97)	15.2 (1.86)	13.3 (2.05)	15.2 (1.63)	12.5 (1.80)	16.4 (6.77)

^aParental reported condition from Household Youth Questionnaire NHANES III

^bAssessed by survey physicians by standardized physical examinations

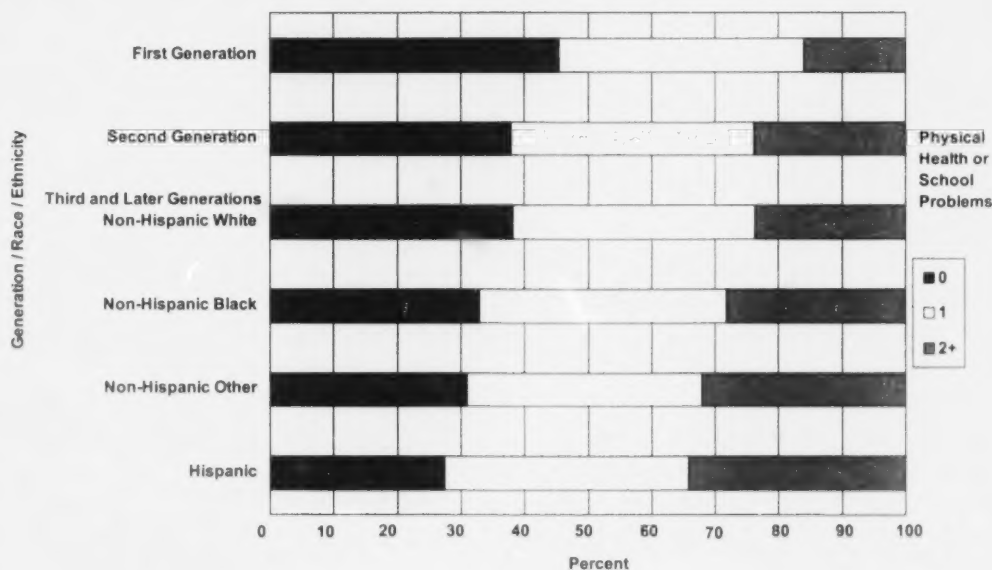
NOTE: Non-Hispanic Asians are not included because of small sample size.

Source: Mendoza and Dixon, 1999.

Although these difference are not always statistically significant because of the limited samples sizes of available data sets, they are quite consistent. Analyses from the National Longitudinal Survey of Adolescent Health (Add Health) for adolescents in grades 7 through 12 in 1995 found the same generational pattern of deterioration of health over time, based on self-reports of neurological impairment, obesity, asthma; and health risk behaviors such as early sexual activity; use of cigarettes, alcohol, marijuana, or hard drugs; delinquency; and use of violence (Harris, 1999) (See Figures 37, 38, 39, 40, and Table 5). These estimates raise the intriguing possibility that immigrant children and youth are somewhat protected, albeit temporarily, from the deleterious health consequences that typically accompany poverty, minority status, and other indicators of disadvantage in the United States.

Figure 37

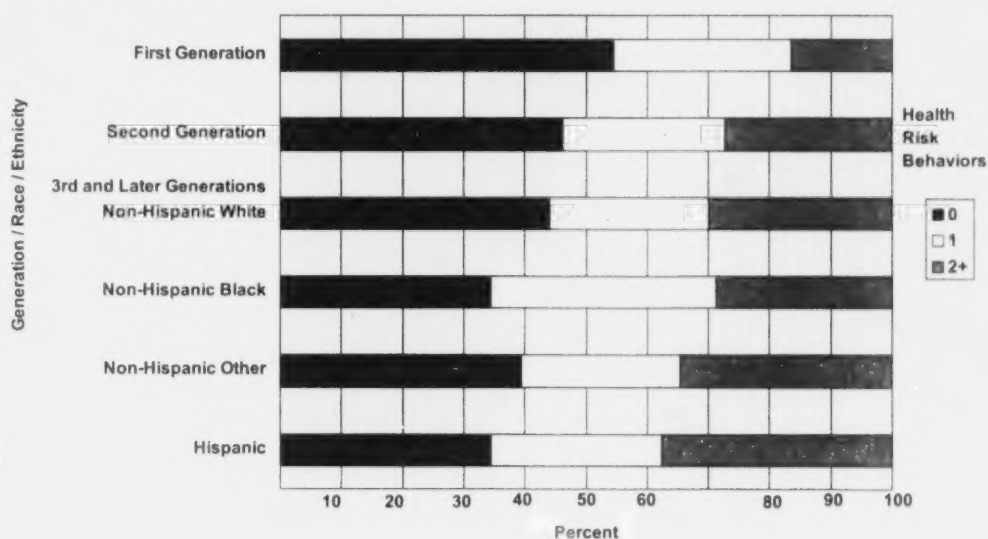
Percent with Physical Health or School Problems for First- and Second-Generation Adolescents by Generation and Third-and-Later-Generation Adolescents by Race and Ethnicity: 1995



Source: Harris, 1999.

Figure 38

Percent Engaging in Health Risk Behavior for First- and Second-Generation Adolescents by Generation and Third-and-Later-Generation Adolescents by Race and Ethnicity: 1995

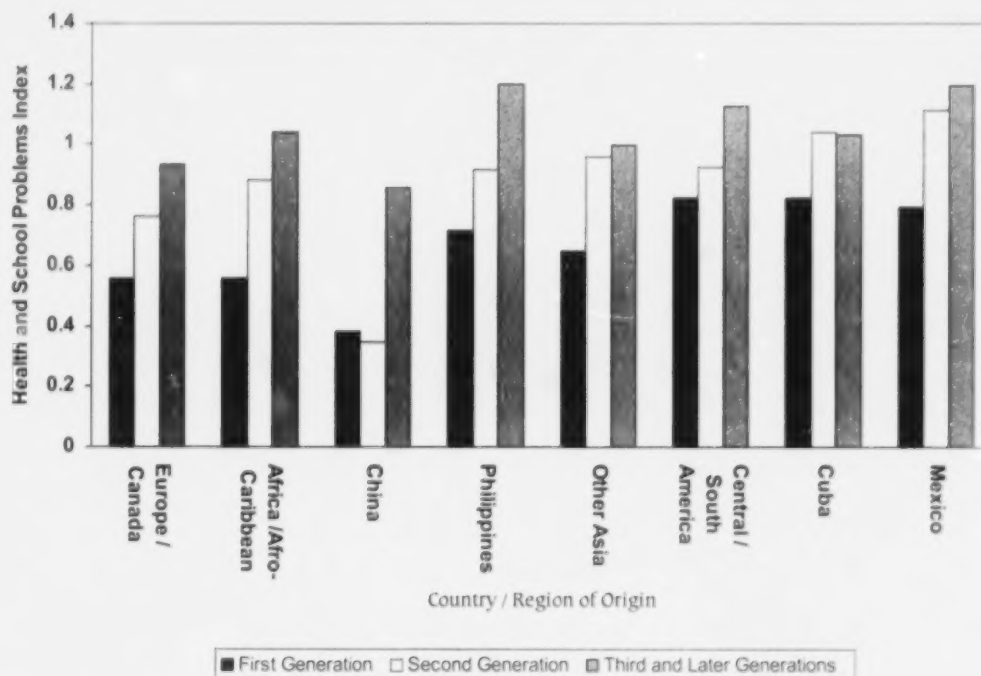


* Native-born with native-born parents.

Source: Harris, 1999.

Figure 39

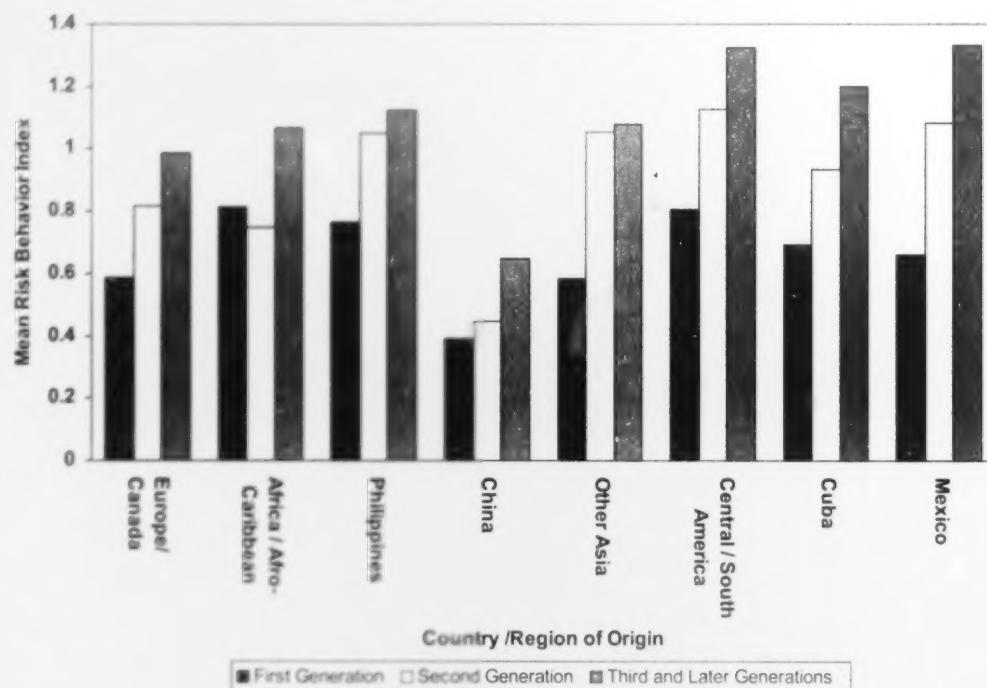
Mean Physical Health and School Problems Index for Adolescents by Generation and by Country or Region of Origin: 1995



Source: Harris, 1999.

Figure 40

Mean Risk Behavior Index for Adolescents by Generation and by Country or Region of Origin: 1995



Source: Harris, 1999.

Table 5

Health Indicators for First- and Second-Generation Adolescents by Generation and for Third-and-Later-Generation Adolescents by Race and Ethnicity: 1995 (means)

	First Generation	Second Generation	Non- Hispanic White, Third and Later Generations	Non- Hispanic Black, Third and Later Generations	Non- Hispanic Other, Third and Later Generations	Hispanic Third and Later Generations	Total
Physical Health							
General health fair or poor	9.2	10.7	8.1	11.5	14.3	13.1	9.7
Missed school due to a health or emotional problem	33.5	36.5	33.6	37.1	40.2	41.1	35.4
Learning difficulties	9.3	12.5	16.9	14.3	15.6	18.3	15.4
Obesity	17	26.7	23.4	29.9	31.5	31	25.3
Asthma	4.8	8.1	12.2	13.5	14.9	15.7	11.8
Health and school problems index	0.74	0.94	0.93	1.05	1.17	1.2	0.97
Emotional Health							
Psychological distress	1.54	1.52	1.45	1.52	1.54	1.54	1.49
Positive well-being	2.85	2.87	3.06	2.99	2.89	2.89	2.99
Health Risk Behavior							
Ever had sex	31.3	33.9	36.7	54.8	39.2	45.3	40.4
Age at 1st intercourse	15.1	14.9	14.8	13.8	14.4	14.2	14.5
Birth control 1st intercourse	56.2	57.3	67.1	64.2	60.5	58.3	63.8
4 or more delinquent acts	15.8	25	21.9	18	26.3	29.6	21.6
3 or more acts of violence	14.6	21.3	19.4	27.2	26.4	31.5	21.9
Use of 3 or more substances	8.3	17.4	25.1	8.6	24.3	25.3	19.4
Risk behavior index	0.7	0.98	1.03	1.09	1.17	1.32	1.03
N	1,651	2,526	10,248	4,312	456	1,429	29,622

NOTE: With the exception of age at first intercourse and emotional health, all differences are statistically significant at the .001 level.

NOTE: Non-Hispanic Asians are not included because of small sample size.

Source: Harris, 1999.

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However, not all conclusions that can be drawn about the health of immigrant children are favorable. Children in immigrant families from Mexico, for example, are more likely to be reported by parents as having teeth in only fair to poor condition, with improvements between the first, second, and third and later generations, and those over age 6 are reported much more likely to ever have had anemia and, especially for those age 12 to 16, to have vision problems (Mendoza and Dixon, 1999). In addition, epidemiological evidence as well as physician reports indicate that children of recently arrived immigrants, and particularly those from selected high risk countries of origin, are at elevated risk of harboring or acquiring tuberculosis, hepatitis A, and parasitic infections, and of having unsafe levels of lead in the blood (Hernandez and Charney, 1998).

Exposure to pesticides is an additional health risk of great concern for children of migrant farm workers in light of its documented links to specific ailments and chronic health conditions (Hernandez and Charney, 1998). Mines (1999) reports analyses from the National Agricultural Workers Survey (NAWS), for example, that 29 percent of U.S.-based children with a migrant farm worker parent (250,000 out of 900,000) in any given year between 1993 and 1995 had a parent who mixed or applied pesticides, or they themselves mixed or applied pesticides. These children may, as harvesters, encounter pesticide residues on crops; they may eat, drink, or smoke in the fields, and thereby ingest pesticides; or they may be exposed to direct spray or drift while working in the field or at home in adjacent migrant labor camps. These chemicals cause acute ailments such as skin rashes, eye irritation, flu-like symptoms, and even death. They may also cause chronic harms such as birth defects, sterility, neurological damage, liver and kidney disease, and cancer (Wilk, 1993). Children are more likely to be harmed by pesticide exposures than are adults because children have lower body weight, higher metabolism, and immature immune and neurological systems (National Research Council, 1993).

PSYCHOLOGICAL ADJUSTMENT

New estimates of psychological adjustment are available from the National Educational Longitudinal Survey (NELS) of 1988 for 8th graders from China, the Philippines, Mexico, and other Hispanic countries (Kao, 1999) and the National Longitudinal Study of Adolescent Health (Add Health) for adolescents in grades 7 through 12 in 1995 with origins in Mexico, Cuba, Central-South America, China, the Philippines, Japan, Vietnam, Africa Afro-Caribbean, and Europe/Canada (Harris, 1999). The Add Health measured psychological distress and psychological well-being; the NELS measured feelings of having control over the direction of one's life (self-efficacy), self-esteem, and feelings of being popular or unpopular among school peers (alienation).

The NELS analyses (Kao, 1999) found that first- and second-generation adolescents had significantly lower feelings of self-efficacy and higher feelings of alienation from their schoolmates as compared to third- and later-generation children. In contrast, adolescents in immigrant families and third- and later-generation adolescents did not differ in their self-esteem. The Add Health analyses (Harris, 1999) found no differences between youth in immigrant families and third- and later-generation adolescents in psychological well-being and psychological distress (Table 5). Taken together, these results suggest that adolescents in immigrant families may be able to maintain positive feelings about themselves and their general well-being despite perceiving that they have relatively less control over their lives and are less well accepted by their school peers.

Important differences among adolescents in immigrant families emerge, however, in analyses distinguishing youth by country of origin and racial and ethnic group, and when controls for socioeconomic status are added. In the NELS data, lower levels of feeling control over their own life occurred among first- and second-generation Mexican-origin and other Hispanic-origin adolescents, and among first-generation Chinese, Filipino, and black adolescents, but not among the second generation of the latter groups, and first- or second-generation white youth in immigrant families (Kao, 1999). The lack of popularity of adolescents in immigrant families, compared to third- and later-generation youth, was found specifically among first- and second-generation Mexican and Chinese youth, not but not among other groups. Although adolescents in immigrant families, overall, do not experience greater psychological distress in the Add Health data than third- and later-generation adolescents, first- and second-generation

Mexican and Filipino youth are more likely to feel such distress than are white non-Hispanic adolescents (Harris, 1999).

Once controls for socioeconomic status are added, the NELS data continue to show relatively lower self-efficacy and greater feelings of alienation among most of the Hispanic, Asian, and black generational groups experiencing these disadvantages, compared to third- and later-generation non-Hispanic whites. Socioeconomic controls have little effect on the magnitude of the disadvantage for Asian youth (both Chinese and Filipino), but forty to sixty percent of the disadvantage for Hispanic and black youth is accounted for by their lower parental education and income; moreover, the lower self-esteem of first- and second-generation Mexican adolescents, compared to third- and later-generation non-Hispanic whites, is accounted for entirely by the lower socioeconomic status of these Mexican-origin youth (Kao, 1999).

When controls for socioeconomic influences, such as family poverty and disadvantaged neighborhood circumstances, are introduced in the Add Health data, these factors were found to be very influential predictors of psychological distress for all adolescents, and especially for Mexican-origin youth. This pattern of results suggests, with the noteworthy partial exception of Mexican youth, a protective influence of immigrant status among adolescents who, for reasons of exposure to poverty and inner-city neighborhoods, would be expected to show poor psychological health (Harris, 1999).

The Children of Immigrants Longitudinal Study (CILS), conducted in Southern California (San Diego) and South Florida (Miami and Fort Lauderdale), is the first large-scale survey of changes in the family, community, and educational experiences of children and youth in immigrant families from nine countries of origin in the Western hemisphere and Asia (see Portes, 1995; 1996; Portes and MacLeod, 1996; Portes and Rumbaut, 1996; Rumbaut, 1994a; 1994b; 1995; 1997a; 1997b). Although it does not provide nationally representative estimates for children from these countries of origin and does not include comparative data from third- and later-generation children, the survey is a rich source of psychological data and provides insights into the processes that might underlie patterns in the psychological well-being of immigrant youth.

New research results focused first on children and youth in immigrant families living in San Diego who were from Mexico, the Philippines, Vietnam, Cambodia, and Laos (Rumbaut, 1999). This research assessed possible risk and protective factors for low self-esteem and depressive symptoms, including gender, country of origin, intrafamily and extrafamily contexts and stressors, educational aspirations and achievement, language preference and skills, and physical looks and popularity with the opposite sex.

The study found lower self-esteem and higher depressive symptoms among immigrant youth for females and for children experiencing high parent-child conflict, low family cohesion, recent serious illness or disability in the family, a high proportion of English-only spoken in the neighborhood, a school perceived as unsafe, dissatisfaction with physical looks, and lack of popularity with the opposite sex. Seven additional factors associated with higher depression were a later age at arrival in the United States, a nonintact family, a recent worsening of the family's economic situation, perceptions of poor teaching quality or unfairness, experience with stress in school, high proportion of friends not planning to attend college, and experience with racial or ethnic discrimination. Also associated with low self-esteem were being of Filipino or Vietnamese origin, a recent family move to another home, low grades and educational aspirations, limited English proficiency (LEP), and LEP status in 1991. The NELS data discussed above also revealed the importance of language factors and school experiences for feelings of self-efficacy among Hispanic and Black immigrant youth, but not for Asian immigrant youth (Kao, 1999).

Despite the potential importance of these factors for enhancing or reducing self-esteem and depression among children in immigrant families, national estimates of the prevalence of experience with most of these factors are not available for children and youth in immigrant families.

EDUCATIONAL EXPERIENCES OF YOUNG CHILDREN

The National Household Education Survey (NHES) provides assessments of important aspects of family and school support for educational success among children ages 3 to 8 years in immigrant families for Hispanics, Asians, and whites and for the foreign-born and native-born (Nord and Griffin, 1999). Estimates for specific countries of origin are not possible because of the limited sample size and lack of information on countries of origin.

Family members can foster school success by engaging in various activities with their young child, including teaching them letters and numbers, reading to them, and working on projects with them (Table 6). For seven different activities of this type in 1996, among third- and later-generation children who were non-Hispanic white, the proportion of children with parents engaged in such activities during the past week ranged from 75 to 93 percent, and the proportions for children in immigrant families were about the same to no more than 11 percentage points smaller. Among children in immigrant families, the proportions were usually higher for second-generation children than for the first generation, and the proportions tended to be 10 to 15 percentage points lower for Hispanic children than for Asians (Nord and Griffin, 1999).

Table 6 (Part 1)

Percent with Parents Reporting Selected Family Educational and School Experiences for Children Ages 3 to 8 Years by Generation and for Third- and Later-Generation Children by Race and Ethnicity: 1996

Characteristic	Children 3-8 years	1st & 2nd Generations						3rd and Later Generations			
		Total	Second Gen.	First Gen.	Hispanic	Asian	White	Total	White	Black	Hispanic
Total(thousands)	22,959	3,213	2,782	430	1,734	239	837	19,746	14,166	3,326	1,652
Family Involvement at Home											
In the past week, someone in family...											
Taught child letters, words, or numbers ^a	93%	92%	93%	86%	90%	97%	94%	94%	93%	96%	91%
Taught child songs or music ^a	76	73	73	68	70	72	78	76	76	83	69
Took child along while doing errands ^a	95	91	90	97	88	79	99	95	96	94	94
Number of times read to child ^b											
Not at all	7	11	11	13	14	6	7	7	6	8	8
Once or twice	20	26	25	34	32	18	17	19	17	25	24
3 or more times	28	25	26	23	25	25	24	29	28	30	29
Every day	44	37	38	31	29	51	51	45	48	37	39
Told child a story	77	76	77	74	71	83	84	77	78	73	79
Worked on arts and crafts project with child	72	65	66	59	59	74	74	73	75	66	72
Played a game, sport, or exercised with child	92	86	87	82	81	92	94	93	94	92	87
Involved child in household chores	95	86	86	83	84	74	90	96	97	95	92
Worked on a project with child like building, making or fixing something ^c	67	56	58	51	47	59	69	68	70	63	67

Footnotes are located on following page

Table 6 (Part 2)

Percent with Parents Reporting Selected Family Educational and School Experiences for Children Ages 3 to 8 Years by Generation and for Third- and Later-Generation Children by Race and Ethnicity: 1996 (Part 1)

Characteristic	Children 3-8 years	Total	1st & 2nd Generations					3rd and Later Generations			
			Second Gen.	First Gen.	Hispanic	Asian	White	Total	White	Black	Hispanic
In the past month, someone in the family....											
Visited the library with child	44	38	38	32	27	54	51	45	47	40	39
Went to a play, concert, or other live show with child	30	26	27	21	21	34	33	30	29	36	27
Visited an art gallery, museum, or historical attraction with child	20	20	20	17	15	24	27	20	19	22	20
Visited a zoo or aquarium with child	17	23	23	21	20	32	26	16	14	23	21
Talked with child about family history or ethnic heritage	52	55	54	60	52	50	61	51	47	65	54
Attended an event with child sponsored by a community, ethnic, or religious group	50	41	41	39	35	38	51	51	52	52	43
Attended an athletic or sporting event in which child was not a player	33	22	24	12	18	19	30	35	36	33	27
Family Involvement at School											
Parents' involvement in school^a											
Low	15	17	17	17	21	13	10	15	13	21	17
Moderate	21	26	25	33	30	30	20	20	19	23	24
High	64	57	58	50	49	57	70	65	68	56	59
Parent attended a general school meeting	83	82	83	78	79	81	87	84	84	81	82
Parent attended class or school event	67	61	61	60	54	56	73	68	71	57	64
Parent volunteered at school	51	38	41	24	29	36	54	53	56	42	46
Parent attended parent-teacher conference	79	82	81	84	83	88	86	79	79	76	78

^aApplies only to children not yet in first grade.

^bApplies to children age 3 years through grade 3.

^cApplies to children in grades 1 and above.

^dApplies to children enrolled in preschool programs or regular school.

NOTE: Hispanic children are designated as such. They are not included in any of the other racial or ethnic categories. The Total columns include children of other races and ethnicities. Because of rounding, percents may not sum to 100.

Source: U.S. Department of Education, National center for Education Statistics, 1996 National Household Education Survey. Nord and Griffin, 1999.

Parents also can foster school achievement by taking their children on a variety of educational outings (Table 6). Estimates of the proportion with parents taking them on six different types of outings in 1996 ranged widely from 12 to 65 percent, and did not vary systematically between first-, second-, and third- and later-generation children, or between Hispanic and Asian children in immigrant families (Nord and Griffin, 1999).

Parental involvement in their children's schools is a third set of activities that foster school achievement (Table 6). Among third- and later-generation children in 1996, 68 percent of non-Hispanic whites had parents highly involved in school, somewhat more than the 59 percent for Hispanics and 56 percent for

non-Hispanic blacks. Among children in immigrant families, the proportion with parents highly involved in school was 57 percent, although most of the difference between these children and third- and later-generation non-Hispanic white children was accounted for by the higher proportion with a moderate level of parental involvement. Parental involvement was greater for the second generation than the first (58 versus 50 percent highly involved). Among children in immigrant families, Hispanics were less likely than Asians to have highly involved parents (49 versus 57 percent) (Nord and Griffin, 1998).

Early childhood programs prior to kindergarten help children prepare for school. The proportions attending early childhood programs among third- and later-generation children were 58, 66, and 47 percent, respectively, for non-Hispanic whites, blacks, and Hispanics, compared to 42 percent for children in immigrant families. The second generation was more likely than the first to attend such programs and Hispanic children in immigrant families were slightly less likely than Asians to attend such programs (Nord and Griffin, 1998).

Children are able to learn better if the schools they attend are well-disciplined and parental participation may be encouraged by a variety of school practices that foster such involvement. Parental ratings of children's schools are available along 10 dimensions, including the school environment (teachers maintain classroom discipline; principal maintains school discipline; teachers and students respect each other), and school practices (school welcomes family involvement and makes it easy; school lets parent know how child is doing in school program; school helps parents understand developmental stages of children; school lets parent know about volunteer opportunities at school; school provides information about how to help child with homework; and school provides information about why child is placed in particular groups or classes).

The proportion with favorable or very favorable parental responses was 45 to 67 percent for non-Hispanic white children. The proportions with favorable ratings were 2 to 10 percentage points lower along most dimensions for third- and later-generation non-Hispanic blacks and Hispanics. These proportions varied between about 15 percentage points less and 15 percentage points more for third- and later-generation children. They also varied substantially but in no specific direction for first- and second-generation children in immigrant families and for Hispanic and Asian children in immigrant families (Nord and Griffin, 1998).

ACADEMIC ACHIEVEMENT

Children from immigrant families face many potential challenges to their educational success. Many of them come from homes in which English is not the main spoken language. Parents may be unfamiliar or uncomfortable with avenues for participation in their children's schooling, and many have received little formal education. Immigrant families tend to settle in large urban areas that have troubled school systems (Fuligni, 1998). It follows that these children may experience difficulties at school. Yet, recent studies suggest that adolescents from immigrant families perform just as well if not better in school than their third- and later-generation peers (Fuligni, 1997; Kao and Tienda, 1995; Fletcher and Steinberg, 1994; Rosenthal and Feldman, 1991; Rumbaut, 1995.)

First- and second-generation adolescents in immigrant families nationally have slightly higher grades and math test scores than third- and later-generation adolescents, but the reading test scores of the first generation are somewhat lower than those of third- and later-generation adolescents (Kao, 1999). The relationship is not uniform for adolescents in immigrant families but varies with country of origin.

First-, second-, and third- and later-generation Mexican adolescents are similar in grades and in math test scores, although there is a tendency, especially for reading test scores, toward improvement across the generations. Mexican adolescents of all generations have substantially lower educational achievements than third- and later-generation non-Hispanic white adolescents; most of the difference for each generation is explained by lower parent education and family income among Mexican adolescents (Kao, 1999).

Chinese adolescents in immigrant families, especially the second generation, exceed third- and later-generation Chinese adolescents in grades and math test scores; however, only the second generation exceeds the third- and higher-generations in reading test scores. Chinese first- and second-generation adolescents also exceed third- and later-generation non-Hispanic white adolescents in grades and math test scores. The second generation has higher reading scores as well. The superior grades and math test scores of first-generation Chinese are not explained by socioeconomic status, psychological well-being, or other school experience. For the second generation, however, a third to a half of the superior performance is explained by these factors, particularly parent education and family income (Kao, 1999).

Among Filipino adolescents, the second generation also achieves better grades and math and reading test scores than the first or third and higher generations. Compared to third- and later-generation non-Hispanic white adolescents, first and second generation Filipino adolescents achieve higher grades. The second generation achieves higher grades, and math and reading test scores (Kao, 1999). One-half to three-fourths of the Filipino advantage in math and reading test scores, compared to third- and later-generation non-Hispanic white adolescents, is accounted for by differences in parent's education and family income.

In the San Diego study, adolescents of immigrants at every grade level had higher grades than the district-wide average, and the school dropout rate was lower among the adolescents in immigrant families, even among Mexican-origin adolescents, despite significant socioeconomic and linguistic handicaps (Rumbaut, 1999). Factors contributing to these outcomes are the amount of time spent doing homework, time spent watching television, and the educational aspirations of the adolescents and their parents (Rumbaut, 1999; Fuligni, 1997).

YOUTH NOT IN SCHOOL AND EDUCATIONAL ATTAINMENTS

The greater the number of years of schooling completed by youth, the more likely they are to obtain well-paid jobs during adulthood. In 1990, first generation youth were substantially more likely than second- and third- and later-generation youth to not be enrolled in school and to have limited educational attainments (Table 7). But most of the difference is accounted for by youth from Mexico, from 5 war-torn countries (Laos, Vietnam, El Salvador, Guatemala, and Nicaragua), and from 3 impoverished countries (Honduras, Haiti, and Dominican Republic), all with very high U.S. child poverty rates.

At age 12, the proportions not enrolled in school were essentially identical at 3-4 percent for the second and third and later generations overall, and the third and later generations of whites, blacks, American Indians, and Hispanics, and for second- and third-generation youth of Mexican origin. The proportion was slightly higher for the first generation, but most of this small difference is accounted for by the high proportion (7 percent) of Mexican-origin youth not in school.

Important differences emerge at older ages, however. By age 17 in 1990, 7-9 percent of second- and third- and later-generation youth were not enrolled in school, and among the third and later generations, the proportion rises from 8 percent for non-Hispanic whites to 11 percent for blacks, and 13 to 14 percent for Hispanics and American Indians (Figure 41). Among Mexican-origin youth age 17, 10-11 percent of the second and third and later generations were not enrolled in school, a level similar to third- and later-generation blacks and somewhat higher than corresponding non-Hispanic whites. But among the first generation age 17, 20 percent were not enrolled in school, and this increased to 38 percent for Mexican-origin youth. In fact, Mexico and the other 8 impoverished and war-torn countries of origin listed above account for 92 percent of all the first-generation youth age 17 who not enrolled in school; 29 percent of all the first-generation youth age 17 from these 9 countries were not enrolled in school. Among other countries of origin, excluding these 9, 10 percent are not enrolled in school, only 1.5 percentage points more than among third- and later-generation non-Hispanic whites.

Table 7

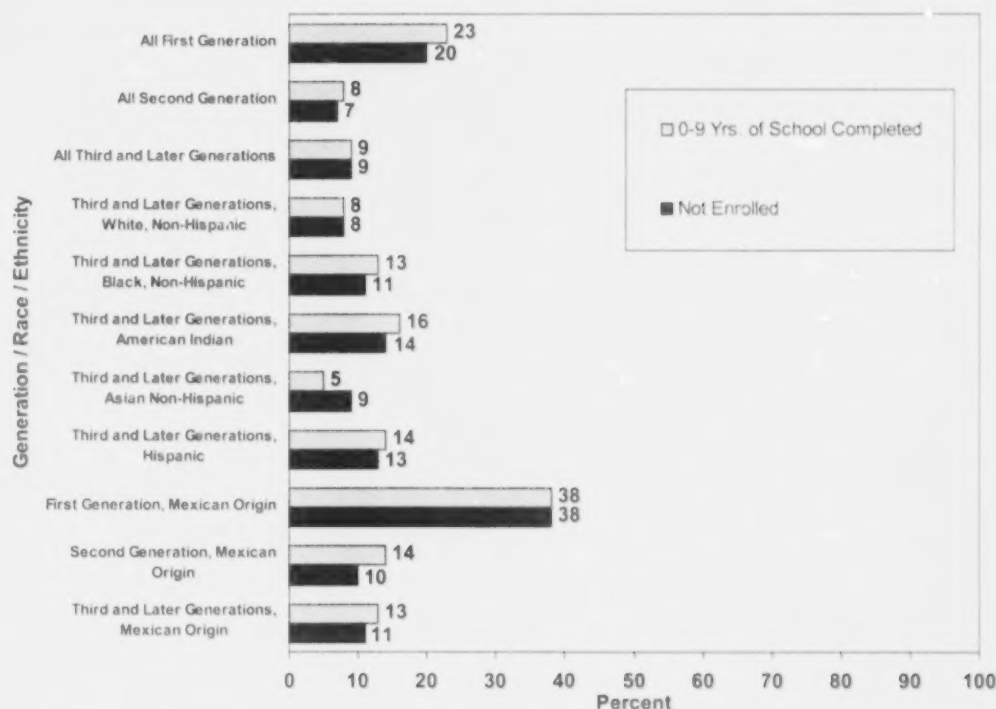
Percent Not Enrolled in School, Completing 0-9 Years of Education, and Neither Enrolled in School Nor Working for Selected Ages of First- and Second-Generation Adolescents by Generation and Third-and-Later-Generation Adolescents by Race and Ethnicity and Mexican Origin: 1990

Generation, Race, and Ethnicity	Not Enrolled in School			Completed 0-9 Years of School	Not Enrolled in School or Working
	Age 12	Age 16	Age 17	Age 17	Age 17
First Generation	5.4	12	20.4	22.7	12
Second Generation	3.4	4.4	7	8.1	4.2
Third and Later Generations	3.5	5.6	9.1	9.3	5.8
White, Non-Hispanic	3.3	5.2	8.3	8.2	4.8
Black, Non-Hispanic	4.2	6.9	11.3	12.5	9.2
Asian, Non-Hispanic	4.8	4.4	8.7	5.2	4.6
American Indian	3.2	8.4	14.3	16.2	10.7
Hispanic	3.5	7.4	12.6	14.1	9.1
Mexican Origin					
First Generation	7.4	22.2	37.8	38.3	21.2
Second Generation	3.4	6.4	10.3	13.8	6.7
Third and Later Generations	3.4	6.7	11.3	13.4	7.8

Source: Calculated from 1990 5% PUMS file.

Figure 41

Percent Not Enrolled in School and Percent with 0-9 Years of Education at Age 17 by Generation, Race, Ethnicity, and Mexican Origin: 1990



Note: See Technical Appendix for description of variables.

Source: Calculated from 1990 5% PUMS file.

Not only were many of the children from these 9 countries not enrolled in school, many had extremely low educational attainments, having completed no more than 9 years of school (Table 7). Among second- and third- and later-generation children as a whole, 8 to 9 percent at age 17 had completed no more than 9 years of school, the same as third- and later-generation non-Hispanic whites. This increased to 14 to 16 percent for third- and later-generation youth age 17 who were black, American Indian, or Hispanic. Among both second- and third- and later-generation Mexican-origin youth age 17, 13-14 percent had completed no more than 9 years of education; but 23 percent of all first-generation youth had completed so little school, and this jumped to 38 percent for first-generation Mexican-origin youth. In fact, Mexican-origin youth age 17 accounted for 59 percent of all first-generation children at this age who had completed no more than 9 years of schooling, and 79 percent of these children were born in Mexico or one of the other 8 countries with high proportions not enrolled in school.

Thus, among youth age 17 from these 9 countries, not only were 29 percent not enrolled in school, but a nearly identical 32 percent had completed no more than 9 years of education. The very limited educational attainments of many of these children no doubt reflects the limited educational opportunities available to them in their countries of birth, and the recency of their migration to the U.S., since school enrollment rates among the first generation at age 12 are much more similar to second- and third- and later-generation children.

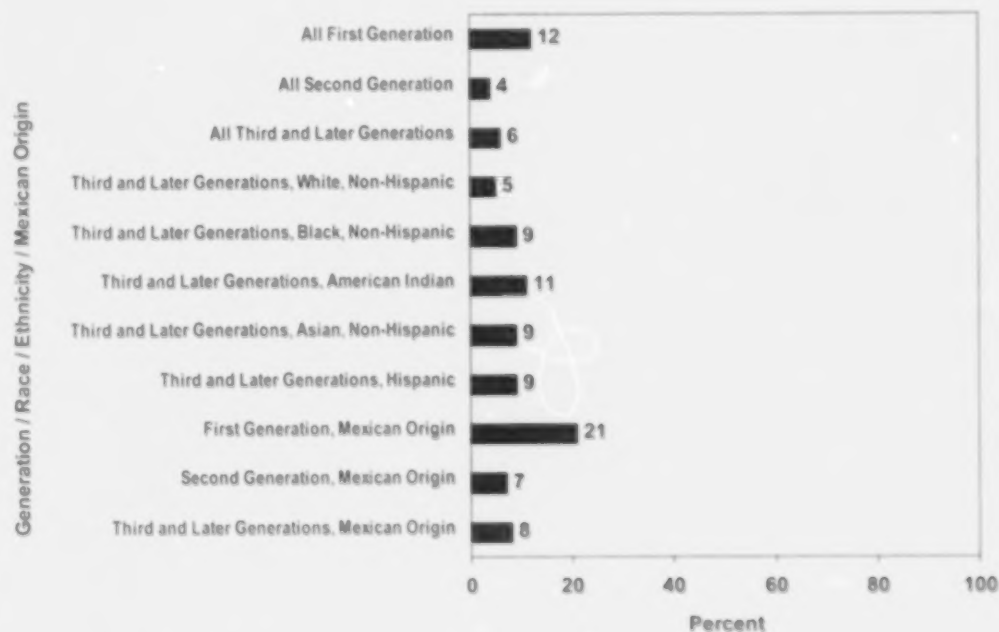
In fact, most of the enormous disadvantage of Mexican-origin youth as a whole (23 percent completing no more than 9 years of schooling) is accounted for by the first generation, and no doubt by first-generation youth who are very recent immigrants; thus, insofar as Mexican-origin youth, and more generally Hispanic youth, have comparatively high proportions not attending school and low educational attainments, much the disadvantage resides among recent immigrants from Mexico who enter the U.S. with very low educational attainments. These youth may have educational and related needs that are quite different from children who immigrate at earlier ages, and from second- and third- and later-generation youth.

YOUTH NOT IN SCHOOL AND NOT WORKING

Youth who are neither in school nor working for pay are at risk of lower earnings and less stable employment than peers who stay in school and/or secure jobs (Federal Interagency Forum on Child and Family Statistics, 1997). Only 4-6 percent of all second- and third- and later-generation adolescents age 17 were neither in school nor working in 1990, compared to 7-8 percent for second- and third- and later-generation Mexican-origin youth, and 9-11 percent for third- and later-generation Black, American Indian, and Hispanic youth (Figure 42 and Table 7).

Figure 42

Percent Not Enrolled in School and Not Working at Age 17, by Generation, Race, Ethnicity, and Mexican Origin: 1990



Note: See Technical Appendix for description of variables.

Source: Calculated from the 1990 5% PUMS file.

Among first-generation youth age 17, 12 percent were neither in school nor working, but this high level is accounted for by the very high proportion (21 percent) among first-generation Mexican-origin youth. Excluding Mexican origin, only 7 percent of first-generation adolescents age 17 were neither working nor in school; thus, among third- and later-generation youth age 17, blacks, American Indians, and Hispanics were about twice as likely as corresponding non-Hispanic whites to be neither in school nor working, and second- and third- and later-generation Mexican-origin adolescents lie between the two. But first-generation Mexican-origin adolescents about twice as likely as the third and later generations of other racial and ethnic minorities to not be engaged in school or work, mainly because many of these youth are not enrolled in school.

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TECHNICAL APPENDIX

The Committee on the Health and Adjustment of Immigrant Children and Families was established by the National Research Council and the Institute of Medicine to assess the development of children (ages 0-17), and to identify factors that affect their health and well-being (Hernandez and Charney, 1998). Eleven new studies commissioned by the committee made every effort to draw on available data to correctly identify and to present estimates for children by generation and immigrant status, country of origin, and race and ethnicity. Because few national information systems currently collect the full array of data needed on country of origin and immigrant status, and because few have samples large enough to support conclusions for more than three or four specific countries, the results derived in these studies and the indicators presented in this essay should be viewed as the best available, first step in assessing the circumstances of children in immigrant families.

Especially important is that each of these studies uses children as the unit of analysis, rather than adults or households. This provides the basis for estimates about the number and proportion of children who have particular characteristics or experience particular circumstances; hence, the results presented here may differ from other published estimates. For example, the poverty rate for children will differ from the poverty rate for households with children, and the percent of children with an employed mother will differ from the percent employed among mothers with children, because each child is counted once in these estimates, instead of lumped together with other children in their household. Indicators pertaining to the well-being of children must use children as the unit of analysis to accurately portray their lives.

The specific approaches used to classify children by generation and country of origin differ somewhat among these eleven studies, and the reader is encouraged to consult the original studies for detailed descriptions of data and procedures (Hernandez, 1999). Examples of the limits imposed by current measurement in the data sets that provide the foundation for indicators and results presented here include the following. None explicitly identify undocumented children and parents, and although some undocumented persons may be included in most samples, estimates of under-coverage of the undocumented population in these data systems are not available. Because many data sets do not ascertain detailed country of birth for the foreign-born, information on race and ethnicity (e.g., Chinese, Filipino, Mexican) is often used as a proxy, which may lead to a misclassification of country of birth for some children or parents; for example, some data ascertain whether a child is foreign-born but not the country of birth. In these situations information about race or Hispanic origin (Chinese, Mexican, etc.) may be used as a substitute. But, for example, some Chinese foreign-born children may not have been born in China, but instead in Vietnam or the Philippines.

Similarly, although the 1990 Census and most other data sets do not ask for children the country of birth of their parents, the birth place of a child's parents can be ascertained from the "country of birth" question for the parent, but only if the parent lives in the child's home; hence, second-generation children who have only one foreign-born parent and who do not have that parent in the home are misclassified as third or later generation. More generally, because virtually no information is available regarding the characteristics or circumstances of parents not living in the home of the child, most estimates pertaining children's parents exclude parents not living in the home. In addition, available data do not allow most third- and later-generation children to be classified by country of origin, except through the use of race and ethnicity data.

One additional caveat regarding inferences drawn from these studies should be noted. Differences between the first, second, and third and later generations may reflect changes brought about through the process of intergenerational assimilation; however, differences between the generations may, alternatively, reflect changes over years or decades in the characteristics of successive waves of immigrants. Among the four Central American countries with high U.S. child poverty rates and for which information is available in the 1990 census not only for the first two generations but also for later-generation children, poverty is substantially lower among third- and later-generation children than among second-generation children. Although this might be due to intergenerational socioeconomic assimilation, a more plausible interpretation is that poverty is lower among the later generations, because the grandparents of the third- and later-generation children entered the U.S. in earlier times with much higher socioeconomic status than did the parents of second-generation children who immigrated more recently. Results

presented in this essay suggest that such a change in the characteristics of immigrants from these countries did, in fact, occur; the parental educational attainments associated with children in immigrant families from these four countries in 1960 were much higher, on average, than the parental educational attainments associated with children in immigrant families from these four countries in 1990. The characteristics of successive waves of immigrants from several other countries of origin, including Cuba and Vietnam, also have changed substantially through time.

Estimates presented in graphs and tables from the 1990 census were derived from the 1990 PUMS 5% sample, and most were published in Hernandez and Darke (1999). Basic variables were derived or calculated from the 1990 census as follows. Children age 0-17 were identified as first generation if foreign-born, second generation if native-born with at least one foreign-born parent, and third and later generation if native-born with native-born parents. In the 1990 census, birthplace of parents could be ascertained only for parents living the child, with the result that some second-generation children were misclassified as third generation, because their foreign-born parent's was not in the home and hence the fact of the parents' foreign birth was not available in the data set. The first generation was classified by the child's own country of birth. The second generation was classified by parents' country of birth, or if parents were foreign-born in different countries, by the mother's country of birth. In 1990, the country of origin for third- and later-generation children was approximated using the race or Hispanic origin of the child as a proxy for country of birth, leading to the misclassification of country of birth for some children.

Parental characteristics (labor force participation, educational attainments, etc.) were available only if the parent was present in the household. Hence, all estimates of father's or mother's characteristics are based on only those children who have the indicated parent in the household. Poverty estimates pertain to 1989, because the 1990 census collected income data for 1989. Relative poverty is estimated using the same units of analysis and equivalence scale as the official measure, but with the threshold not only for poverty but for near-poor frugality, middle-class comfort, and luxury-level living, as defined in the text of the essay. Full-time year-round work is defined as 48 or more weeks worked last year, and 35 or more hours worked last week. The number of siblings in the homes of children is estimated as the number of children ever born to the child's mother; thus, estimates are available only for children living with a mother. Overcrowding is defined as more than one person per room, and calculated by dividing the number of persons in the household by the number of rooms in the housing unit.

Estimates from the 1910 and 1960 censuses were derived from the 1910 and 1960 IPUMS files (Ruggles and Sobek, 1995) using procedures as similar as possible to those for 1990. These years were selected for analysis here for the following reasons. The 1990 census provides the best, most recent source of information on socioeconomic and family circumstances for children with origins in a large number of countries. The 1910 census allows for an examination of children's circumstances following the decade of peak immigration to the U.S. (1901-1910), and the 1960 census allows an examination of children's circumstances at the end of the subsequent era of very low immigration (1931-1960). Additional research is planned using census data for intervening years, and stretching back in time to 1850.

Appendix Table A (a - Part I)

Socioeconomic and Demographic Indicators for First- and Second-Generation Children by Country of Origin for First and Second Generations Combined and for Third-and-Later-Generation Children by Race and Ethnicity: 1990

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generation combined]											
	Social and Economic Risk Factors										
	Number of Children (in thousands)	% of children in official poverty	% of children in relative poverty	% of children in middle-class comfort	% of children financially	% of children very well-off families	% of children whose fathers have less than a high school education	% of children whose mothers have less than a high school education	% of children with 5 or more siblings	% of children who live in linguistically isolated households	% of children who are not U.S. citizens, or who have at least 1 parent in the home who is not a citizen
White, Non-Hispanic	40201	11	17	42	26	18	12	12	4	0	N/A
Black, Non-Hispanic	8031	40	51	25	9	62	26	29	10	0	N/A
Asian, Non-Hispanic	329	10	14	38	37	25	7	9	6	1	N/A
American Indian	562	38	51	24	7	40	28	29	10	4	N/A
Hispanic	3489	31	42	31	11	42	30	35	8	9	N/A
All First and Second	8373	22	33	31	19	17	39	42	8	26	65
All Third and Later Generations	52685	17	24	39	22	26	15	16	4	1	N/A
First and Second Generations by Country of Origin											
Laos	113	51	65	16	2	15	54	73	35	60	89
Cambodia	64	46	62	19	4	26	57	76	18	60	85
Dominican Republic	179	42	55	24	5	48	49	55	5	41	73
USSR	62	36	42	23	26	10	20	18	5	46	62
Mexico	2618	35	52	22	4	19	74	74	14	38	78
Thailand	69	33	42	29	16	13	34	56	17	42	75
Vietnam	226	31	42	29	13	19	39	54	11	45	63
Guatemala	101	30	46	24	7	28	56	61	5	43	81
Honduras	52	29	46	26	8	31	42	44	5	34	73
El Salvador	203	27	44	26	5	31	61	65	6	46	83
Nicaragua	74	27	43	28	8	27	34	40	8	43	83
Haiti	105	26	39	30	10	36	38	43	8	34	75
Jordan	19	25	35	31	14	7	25	31	13	10	38
Belize	16	23	31	35	12	29	29	29	6	4	72
Iraq	20	21	30	39	17	5	32	42	10	16	44
Ecuador	64	20	31	36	14	24	34	35	3	29	76
Venezuela	22	20	25	37	25	12	14	15	2	19	76
Israel	60	19	25	31	32	5	16	19	16	12	42
Trinidad & Tobago	52	18	28	37	20	37	23	19	5	1	71
Colombia	117	17	27	37	16	23	29	30	2	31	70
Pakistan	39	16	23	36	27	6	8	18	6	13	55
Costa Rica	23	16	26	38	17	19	28	31	3	17	68

NOTE: See Technical Appendix for description of variables.

Source: Hernandez and Darke, 1999.

Appendix Table A (a - Part2)

	Social and Economic Risk Factors										% of children who are not U.S. citizens, or who have at least 1 parent in the home who is not a citizen
	Number of Children (in thousands)	% of children in official poverty	% of children in relative poverty	% of children in middle-class comfort	% of children very well-off financially	% of children in one-parent families	% of children whose fathers have less than a high school education	% of children whose mothers have less than a high school education	% of children with 5 or more siblings	% of children who live in linguistically isolated households	
Panama	40	16	25	37	23	23	12	16	3	7	48
Brazil	31	16	24	39	25	14	20	20	3	22	76
Romania	26	15	22	32	30	8	25	25	18	21	47
Spain	27	15	21	39	27	14	23	26	3	12	65
Lebanon	36	15	23	34	24	6	28	29	8	11	40
Jamaica	132	15	25	37	21	36	27	22	4	0	66
Guyana	46	15	22	41	18	31	25	28	4	1	62
Nigeria	34	15	27	35	15	16	2	5	7	4	82
China	131	14	24	30	30	9	31	35	2	41	46
Indonesia	17	14	19	37	31	8	8	11	3	21	50
Iran	76	14	19	32	37	9	6	11	1	18	67
Cuba	211	14	22	38	27	21	28	27	2	16	47
Peru	61	13	25	37	19	18	18	19	3	25	67
Korea	231	12	19	38	26	9	6	18	0	34	55
Syria	15	12	21	33	29	4	22	25	4	17	43
Taiwan	97	11	15	33	42	10	5	8	1	36	52
Argentina	35	11	19	38	29	11	21	20	2	15	60
Yugoslavia	44	10	16	42	27	10	30	32	3	11	44
Hong Kong	56	10	16	33	37	8	24	29	1	35	39
Chile	21	10	18	37	28	15	14	17	3	18	64
Australia	18	10	16	32	44	9	8	11	7	1	76
Austria	21	9	14	41	38	8	8	8	10	2	29
France	41	9	13	34	41	11	9	9	5	6	56
Hungary	25	9	14	35	39	9	14	13	9	10	27
Egypt	29	9	15	36	39	6	4	8	5	10	34
Germany	258	8	14	40	32	11	8	11	3	2	36
Greece	68	8	16	42	25	6	39	32	1	12	36
Japan	100	8	12	37	41	7	4	7	1	28	73
Barbados	15	8	16	47	21	39	25	21	8	0	58
Poland	80	7	12	45	32	10	19	15	1	22	54
Turkey	15	7	13	32	38	8	18	18	2	11	51
Italy	179	6	11	45	30	6	34	29	2	7	39
Portugal	77	6	11	51	22	8	61	58	1	23	63
United Kingdom	209	6	10	38	41	10	6	9	3	0	64
Canada	263	6	11	39	39	9	10	10	5	1	62
South Africa	15	6	10	25	57	5	2	7	1	1	58
Netherlands	38	5	11	39	38	7	7	6	6	1	43
India	175	5	9	35	47	4	7	12	1	11	68
Philippines	399	5	10	45	32	12	8	13	3	9	44
Ireland	44	4	7	41	39	8	15	14	4	0	48

Appendix Table A (b - Part 1)

Socioeconomic and Demographic Indicators for First- and Second-Generation Children by Country of Origin for First and Second Generations Combined and for Third-and-Later-Generation Children by Race and Ethnicity: 1990

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generation combined]

	Household and Housing Risk Factors					Parents' Labor Force Participation		
	% of children in households with no car or truck	% of children with no telephone in their homes	% of children living in houses built before 1950	% of children in crowded homes	% of children with fathers not in the labor force	% of children with fathers not working full-time, year-round	% of children with mothers not in the labor force	
White, Non-Hispanic	3	5	23	7	4	19	34	
Black, Non-Hispanic	30	18	27	26	11	34	33	
Asian, Non-Hispanic	4	3	18	21	4	18	29	
American Indian	14	32	17	34	14	46	40	
Hispanic	17	15	25	30	8	30	43	
All First and Second Generations	11	7	24	44	7	31	42	
All Third and Later Generations	8	8	24	12	5	21	34	
First and Second Generations by Country of Origin								
Laos	17	4	28	78	48	68	66	
Cambodia	29	4	31	74	41	60	65	
Dominican Republic	54	19	50	52	11	38	52	
USSR	23	2	32	40	21	54	46	
Mexico	10	15	23	69	7	38	50	
Thailand	15	3	24	49	30	46	53	
Vietnam	13	1	19	58	19	42	46	
Guatemala	18	9	33	67	5	31	41	
Honduras	22	9	26	56	8	37	41	
El Salvador	15	8	29	75	5	32	34	
Nicaragua	13	10	24	71	5	32	31	
Haiti	24	10	33	53	8	36	22	
Jordan	8	2	23	31	11	30	68	
Belize	19	7	35	44	9	33	31	
Iraq	4	1	17	34	10	30	61	
Ecuador	24	8	41	43	4	30	39	
Venezuela	6	4	18	30	8	28	47	
Israel	13	1	28	27	7	26	54	
Trinidad & Tobago	29	7	39	30	8	34	25	
Colombia	13	6	27	42	4	28	38	
Pakistan	7	2	17	35	4	26	60	
Costa Rica	14	4	28	33	8	31	38	
Panama	16	6	25	25	6	27	29	
Brazil	7	2	24	24	6	28	47	
Romania	8	2	32	31	9	26	46	

Appendix Table A (b - Part 2)

	Household and Housing Risk Factors					Parents' Labor Force Participation		
	% of children in households with no car or truck	% of children with no telephone in their homes	% of children living in houses built before 1950	% of children in crowded homes		% of children with fathers not in the labor force	% of children with fathers not working full-time, year-round	% of children with mothers not in the labor force
Spain	8	3	28	20		5	26	40
Lebanon	4	2	26	20		9	27	61
Jamaica	22	5	30	29		6	29	17
Guyana	30	4	40	36		6	28	26
Nigeria	10	3	18	50		6	38	26
China	18	1	33	39		5	27	31
Indonesia	4	1	16	29		10	29	41
Iran	4	1	12	21		8	28	46
Cuba	6	3	17	28		4	22	34
Peru	11	4	26	36		4	27	35
Korea	3	1	13	33		6	26	39
Syria	2	0	20	23		8	32	58
Taiwan	3	0	11	24		6	23	40
Argentina	6	2	20	24		3	21	44
Yugoslavia	6	1	31	16		6	26	42
Hong Kong	9	1	26	34		6	21	31
Chile	6	2	21	28		3	19	38
Australia	5	0	23	9		4	16	49
Austria	5	0	27	11		4	19	35
France	5	1	29	11		3	20	43
Hungary	8	2	26	14		5	20	41
Egypt	4	1	24	20		4	23	42
Germany	3	3	22	8		3	18	37
Greece	4	1	26	9		6	26	46
Japan	3	1	15	12		4	20	58
Barbados	29	4	41	22		5	23	20
Poland	5	1	32	10		4	21	34
Turkey	4	1	22	16		4	20	48
Italy	4	1	31	7		5	21	47
Portugal	4	2	43	14		5	27	29
United Kingdom	3	2	22	7		3	17	38
Canada	2	2	20	8		3	18	38
South Africa	4	1	20	7		4	17	48
Netherlands	2	1	23	8		2	14	39
India	5	1	13	24		2	19	35
Philippines	3	1	15	38		5	22	18
Ireland	4	1	38	8		4	18	42

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Appendix Table A (c - Part 1)

Socioeconomic and Demographic Indicators for First- and Second-Generation Children by Country of Origin for First and Second Generations Combined and for Third-and-Later-Generation Children by Race and Ethnicity: 1990

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generation combined]							
	Parents' Extremely Low and High Education				Children's Language Use and Citizenship		
	% of children with fathers who have 8 or fewer years of education	% of children with mothers who have 8 or fewer years of education	% of children whose fathers have four or more years of college education	% of children whose mothers have four or more years of college education	% of children who do not speak English exclusively or very well	% of children who do not speak English at home	% of children not U.S. citizens
White, Non-Hispanic	3	2	28	20	3	1	N/A
Black, Non-Hispanic	6	4	12	9	3	1	N/A
Asian, Non-Hispanic	1	1	40	31	8	3	N/A
American Indian	8	6	9	7	18	7	N/A
Hispanic	9	10	12	7	43	15	N/A
All First and Second Generations	25	26	24	16	67	27	21
All Third and Later Generations	3	3	26	18	6	2	N/A
First and Second Generations by Country of Origin							
Laos	41	60	7	3	96	61	39
Cambodia	42	60	6	2	93	59	42
Dominican Republic	27	30	9	5	93	39	23
USSR	8	6	41	36	84	45	51
Mexico	55	52	4	2	91	40	21
Thailand	25	45	24	13	66	39	48
Vietnam	21	32	18	8	87	44	34
Guatemala	35	38	9	5	90	40	31
Honduras	23	24	13	7	79	31	29
El Salvador	37	40	6	4	94	44	34
Nicaragua	17	17	21	11	89	46	51
Haiti	14	17	14	10	75	29	22
Jordan	11	12	29	11	62	11	9
Belize	10	7	14	7	18	5	16
Iraq	13	21	25	16	69	11	12
Ecuador	14	13	18	9	85	24	17
Venezuela	6	5	45	28	70	23	31
Israel	5	6	41	32	65	19	18
Trinidad & Tobago	7	5	18	12	6	1	18
Colombia	11	12	22	13	84	23	21
Pakistan	3	8	65	41	72	19	20
Costa Rica	11	12	20	13	68	18	16
Panama	2	3	26	17	42	13	12
Brazil	9	10	40	29	67	25	28
Romania	9	10	38	31	73	23	33

Appendix Table A (c - Part 2)

	Parents' Extremely Low and High Education				Children's Language Use and Citizenship		
	% of children with fathers who have 8 or fewer years of education	% of children with mothers who have 8 or fewer years of education	% of children whose fathers have four or more years of college education	% of children whose mothers have four or more years of college education	% of children who do not speak English at home	% of children who do not speak English exclusively or very well	% of children not U.S. citizens
Spain	12	12	29	19	64	15	17
Lebanon	14	12	35	21	71	16	15
Jamaica	8	5	19	15	6	2	24
Guyana	6	8	23	12	7	2	31
Nigeria	0	2	80	45	23	7	12
China	18	20	39	28	81	36	22
Indonesia	2	4	54	34	41	18	23
Iran	2	3	68	39	68	20	28
Cuba	12	9	25	16	81	18	11
Peru	5	6	29	17	81	26	26
Korea	2	7	43	28	65	23	23
Syria	10	11	41	19	61	15	12
Taiwan	3	4	73	52	80	28	27
Argentina	9	7	34	25	69	17	24
Yugoslavia	18	19	18	14	61	10	9
Hong Kong	13	14	43	30	79	35	24
Chile	5	5	33	22	74	17	19
Australia	3	1	50	33	13	3	18
Austria	2	1	45	37	26	9	4
France	4	2	49	36	46	10	15
Hungary	6	3	39	29	43	13	9
Egypt	1	2	67	44	56	13	10
Germany	2	2	35	22	18	4	5
Greece	23	19	21	17	70	11	3
Japan	2	2	55	32	54	29	31
Barbados	8	4	18	14	3	1	17
Poland	7	5	30	23	66	15	18
Turkey	10	9	41	32	55	8	15
Italy	19	16	19	14	37	8	3
Portugal	43	39	7	5	75	16	14
United Kingdom	1	1	43	26	7	2	13
Canada	3	2	40	26	11	3	11
South Africa	0	1	68	40	12	3	30
Netherlands	2	1	41	26	13	3	5
India	2	4	76	59	63	14	22
Philippines	3	6	39	46	35	11	15
Ireland	5	3	31	19	5	1	8

Appendix Table B (a)

Socioeconomic and Demographic Indicators for First- and Second-Generation Children by Country of Origin for First and Second Generations Separately, and for Third- and Later-Generation Children by Race and Ethnicity: 1990

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]

	Social and Economic Risk Factors										Household and Housing Risk Factors		
	Number of Children (in thousands)	% of children in official poverty	% of children in relative poverty	% of children in middle-class comfort	% of children very well-off financially	% of children in one-parent families	% of children whose fathers have less than a high school education	% of children whose mothers have less than a high school education	% of children with 5 or more siblings	% of children who live in linguistically isolated households	% of children who are not U.S. citizens, or who have at least 1 parent in the home who is not a citizen	% of children in households with no car or truck	% of children living in crowded homes built before 1950
White, Non-Hispanic	40201	11	17	42	26	18	12	12	4	0	N/A	3	5
Black, Non-Hispanic	8031	40	51	25	9	62	26	29	10	0	N/A	30	18
Asian, Non-Hispanic	329	10	14	38	37	25	7	9	6	1	N/A	4	5
American Indian	562	38	51	24	7	40	28	29	10	4	N/A	14	32
Hispanic	3489	31	42	31	11	42	30	35	8	9	N/A	17	15
First and Second Generation Children by Country of Origin													
All First Generation Children	2048	33	47	24	11	23	49	54	17	41	87	17	10
All Second Generation Children	6288	19	29	33	21	15	36	38	9	21	59	9	6
Laos - 1st Generation	49	51	64	16	1	17	60	75	29	55	91	18	4
Laos - 2nd Generation	64	50	65	15	2	13	50	72	49	63	88	17	4
Cambodia - 1st Generation	30	52	68	14	3	27	65	80	19	58	92	32	5
Cambodia - 2nd Generation	34	41	57	23	6	25	50	73	17	63	80	27	4
Dominican Republic - 1st Generation	48	41	57	21	2	51	63	65	6	49	89	60	22
Dominican Republic - 2nd Generation	131	42	54	25	7	47	44	52	4	38	68	51	18
USSR - 1st Generation	38	51	60	17	14	11	26	23	7	64	84	32	3
USSR - 2nd Generation	24	11	14	32	45	10	11	10	2	19	29	8	0
Mexico - 1st Generation	643	44	63	14	2	23	83	85	19	52	89	15	21
Mexico - 2nd Generation	1975	32	49	24	5	18	71	71	12	33	74	8	10
Thailand - 1st Generation	36	59	73	12	3	16	63	76	33	67	94	27	4
Thailand - 2nd Generation	33	5	10	46	29	9	6	36	1	15	56	2	1

Note: See Technical Appendix for description of variables.

Source: Hernandez and Darke, 1999.

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Appendix Table B (b)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]														
	Social and Economic Risk Factors										Household and Housing Risk Factors			
	Number of children (in thousands)	% of children in official poverty	% of children in relative poverty	% of children in middle-class comfort	% of children who are only marginally	% of children very well-off	% of children in one-parent families	% of children whose fathers have less than a high school education	% of children whose mothers have less than a high school education	% of children with 5 or more siblings	% of children who live in linguistically isolated households	% of children who are not U.S. citizens, or who have at least 1 parent in the home who is not a citizen	% of children in households with no car or truck	% of children living in houses built before 1950
Vietnam - 1st Generation	99	42	54	23	7	23	51	64	15	46	81	18	2	21
Vietnam - 2nd Generation	33	23	32	35	19	15	30	47	9	44	51	10	1	17
Guatemala - 1st Generation	85	36	54	19	3	32	66	73	6	53	91	20	10	32
Guatemala - 2nd Generation	66	27	42	27	9	26	52	55	5	38	76	17	8	34
Honduras - 1st Generation	17	37	59	19	2	41	49	56	8	49	92	26	12	27
Honduras - 2nd Generation	35	25	40	29	10	27	39	39	3	26	64	21	8	25
El Salvador - 1st Generation	77	32	50	21	3	36	69	75	8	48	91	16	8	28
El Salvador - 2nd Generation	126	25	41	29	7	29	57	60	5	45	79	15	7	30
Nicaragua - 1st Generation	89	36	55	20	3	30	40	46	11	54	97	17	13	25
Nicaragua - 2nd Generation	35	18	29	37	14	24	28	34	5	30	69	8	6	22
Haiti - 1st Generation	28	30	49	25	5	39	49	57	10	39	90	30	13	34
Haiti - 2nd Generation	77	24	36	32	12	35	35	38	8	32	71	21	9	33
Jordan - 1st Generation	3	47	54	26	8	16	36	40	11	23	79	15	9	15
Jordan - 2nd Generation	17	27	33	31	15	6	24	30	13	8	33	7	1	24
Belize - 1st Generation	5	23	39	30	11	34	40	42	6	10	80	33	7	35
Belize - 2nd Generation	12	23	28	36	13	27	26	26	6	3	70	16	6	35
Iraq - 1st Generation	4	34	46	34	10	6	46	59	14	14	78	10	3	31
Iraq - 2nd Generation	17	19	27	40	18	5	29	38	9	16	37	3	1	14
Ecuador - 1st Generation	12	26	40	30	7	32	43	49	4	42	90	34	11	46
Ecuador - 2nd Generation	52	19	28	38	16	22	32	32	3	26	73	22	7	40

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Appendix Table B (c)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]														
	Social and Economic Risk Factors										Household and Housing Risk Factors			
	Number of children (in thousands)	% of children in relative poverty	% of children in official poverty	% of children in middle-class comfort	% of children very well off financially	% of children in one-parent families	% of children whose fathers have less than a high school education	% of children whose mothers have less than a high school education	% of children with 5 or more siblings	% of children who live in linguistically isolated households	% of children who are not U.S. citizens, or who have at least 1 parent in the home who is not a citizen	% of children in households with no car or truck	% of children with no telephone in their homes	% of children living in houses built before 1950
Venezuela - 1st Generation	8	35	39	27	15	19	21	23	2	36	92	11	4	21
Venezuela - 2nd Generation	15	13	18	41	30	9	10	12	2	10	68	4	5	16
Israel - 1st Generation	13	23	30	35	23	7	15	17	12	22	75	11	2	25
Israel - 2nd Generation	46	18	24	30	35	5	17	20	18	9	31	13	1	29
Trinidad & Tobago - 1st Generation	12	30	43	27	10	46	37	33	4	2	86	40	9	45
Trinidad & Tobago - 2nd Generation	41	14	23	39	23	35	20	16	5	0	68	25	6	37
Columbia - 1st Generation	29	19	34	33	9	32	34	42	3	44	90	17	9	29
Columbia - 2nd Generation	88	16	24	39	18	21	27	27	1	27	64	11	5	26
Pakistan - 1st Generation	11	24	34	32	13	10	10	20	6	21	80	10	2	20
Pakistan - 2nd Generation	28	13	18	38	32	4	7	17	6	10	46	6	2	16
Costa Rica - 1st Generation	4	29	40	36	6	26	41	36	5	34	91	18	11	22
Costa Rica - 2nd Generation	19	14	23	38	20	17	26	30	2	14	63	13	3	30
Panama - 1st Generation	6	27	39	39	9	34	15	23	3	19	79	25	3	28
Panama - 2nd Generation	33	15	23	36	26	21	11	14	2	5	43	15	7	25
Brazil - 1st Generation	9	21	35	33	16	19	24	23	2	45	96	10	2	24
Brazil - 2nd Generation	21	13	20	42	29	12	18	19	4	11	68	6	3	25
Romania - 1st Generation	11	18	27	33	21	9	32	32	19	34	79	10	5	37
Romania - 2nd Generation	15	13	18	31	36	7	21	21	17	13	25	7	0	29

Appendix Table B (d)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]													
	Social and Economic Risk Factors										Household and Housing Risk Factors		
	Number of Children (in thousands)	% of children in official poverty	% of children in relative poverty	% of children in middle-class comfort	% of children very well-off financially	% of children in one-parent families	% of children whose fathers have less than a high school education	% of children whose mothers have less than a high school education	% of children with 5 or more siblings	% of children who live in linguistically isolated households	% of children who are not U.S. citizens, or who have at least 1 parent in the home who is not a citizen	% of children in households with no car or truck	% of children in crowded homes
Spain - 1st Generation	6	37	47	28	12	19	43	43	3	29	85	10	4
Spain - 2nd Generation	22	9	15	42	31	12	20	23	3	8	60	7	3
Lebanon - 1st Generation	8	25	39	22	18	11	47	47	8	21	71	9	1
Lebanon - 2nd Generation	28	12	18	37	26	5	23	24	8	9	32	3	2
Jamaica - 1st Generation	40	18	30	36	13	44	37	31	5	0	85	29	5
Jamaica - 2nd Generation	92	14	23	37	25	33	24	18	4	0	59	19	5
Guyana - 1st Generation	18	18	28	38	10	36	38	40	5	2	81	42	3
Guyana - 2nd Generation	28	13	19	43	23	28	17	21	4	1	51	23	5
Nigeria - 1st Generation	5	28	37	29	7	22	4	8	16	7	89	19	4
Nigeria - 2nd Generation	29	13	25	36	16	15	2	5	6	4	81	9	3
China - 1st Generation	34	25	42	28	9	10	45	53	3	59	85	36	2
China - 2nd Generation	97	10	18	30	37	9	26	28	1	35	32	12	1
Indonesia - 1st Generation	4	45	50	22	12	15	20	29	3	48	92	11	2
Indonesia - 2nd Generation	13	4	9	43	38	6	5	6	3	11	37	2	1
Iran - 1st Generation	24	27	34	29	24	14	13	19	1	34	90	8	1
Iran - 2nd Generation	52	8	12	33	43	6	3	7	1	10	57	3	1
Cuba - 1st Generation	27	27	40	30	9	25	60	60	2	39	89	12	4
Cuba - 2nd Generation	184	13	19	39	29	21	24	22	2	13	42	6	3
Peru - 1st Generation	18	22	39	27	12	21	19	23	3	42	89	13	4
Peru - 2nd Generation	43	10	19	41	22	16	18	18	2	19	59	10	4
Korea - 1st Generation	67	20	29	33	19	11	12	18	0	48	85	5	1
Korea - 2nd Generation	163	9	15	40	29	9	4	18	0	28	43	2	1

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Appendix Table B (e)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]													
	Social and Economic Risk Factors										Household and Housing Risk Factors		
	Number of children (in thousands)	% of children in official poverty	% of children in relative poverty	% of children in middle-class comfort	% of children very well-off financially	% of children in one-parent families	% of children whose fathers have less than a high school education	% of children whose mothers have less than a high school education	% of children with 5 or more siblings	% of children who live in linguistically isolated households	% of children who are not U.S. citizens, or who have at least 1 parent in the home who is not a citizen	% of children in households with no car or truck	% of children living in crowded homes
Syria - 1st Generation	2	28	41	41	4	5	32	39	4	40	77	6	25
Syria - 2nd Generation	13	9	18	31	34	4	20	22	4	12	37	2	19
Taiwan - 1st Generation	32	19	26	35	24	17	9	13	1	41	81	4	13
Taiwan - 2nd Generation	65	7	10	31	51	6	3	6	1	31	39	2	10
Argentina - 1st Generation	10	18	32	30	18	13	32	32	1	32	91	6	15
Argentina - 2nd Generation	26	9	14	41	33	10	17	15	3	9	50	6	22
Yugoslavia - 1st Generation	5	12	19	44	19	11	31	35	3	27	86	13	4
Yugoslavia - 2nd Generation	39	10	15	42	28	10	30	31	3	9	39	5	1
Hong Kong - 1st Generation	17	26	35	31	14	15	49	57	3	54	78	19	1
Hong Kong - 2nd Generation	39	3	8	35	47	5	14	17	1	26	23	5	0
Chile - 1st Generation	5	19	28	33	17	18	21	28	0	37	90	8	3
Chile - 2nd Generation	17	8	15	38	31	14	13	14	4	12	57	5	1
Australia - 1st Generation	3	13	17	27	45	11	9	14	2	3	95	6	1
Australia - 2nd Generation	14	10	16	33	43	9	8	10	9	1	71	5	0
Austria - 1st Generation	1	33	42	30	13	18	23	26	16	24	71	20	0
Austria - 2nd Generation	20	7	12	42	40	7	7	7	10	0	26	4	0
France - 1st Generation	7	11	14	30	48	11	10	14	1	24	91	5	2
France - 2nd Generation	34	8	13	35	39	11	9	9	5	4	49	5	1
Hungary - 1st Generation	3	17	20	33	26	8	18	21	13	37	81	16	2
Hungary - 2nd Generation	22	8	13	35	41	9	14	12	8	6	20	7	2
Egypt - 1st Generation	5	20	29	42	19	12	5	10	4	27	67	7	2
Egypt - 2nd Generation	25	7	12	35	43	5	4	8	5	7	28	8	1

Appendix Table B (f)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]															
	Social and Economic Risk Factors										Household and Housing Risk Factors				
	Number of children (in thousands)	% of children in official poverty	% of children in relative poverty	% of children in middle-class comfort	% of children very well-off financially	% of children in one-parent families	% of children whose fathers have less than a high school education	% of children whose mothers have less than a high school education	siblings % of children with 5 or more	% of children who live in linguistically isolated households	% of children who are not U.S. citizens, or who have at least 1 parent in the home who is not a citizen	% of children in households with no car or truck	% of children with no telephone in their homes	% of children living in crowded homes built before 1950	% of children in crowded homes
Germany - 1st Generation	16	25	32	31	25	22	10	18	4	11	84	5	3	19	17
Germany - 2nd Generation	243	7	12	41	33	11	8	10	3	1	34	3	3	22	7
Greece - 1st Generation	3	16	24	44	17	10	45	51	0	33	69	7	2	36	15
Greece - 2nd Generation	65	8	15	42	26	6	39	31	1	11	34	3	1	26	9
Japan - 1st Generation	32	11	13	26	52	3	3	4	1	63	97	2	0	13	14
Japan - 2nd Generation	68	6	11	41	36	9	5	8	1	12	62	5	2	16	12
Barbados - 1st Generation	3	6	25	36	13	54	33	35	7	0	76	38	3	65	39
Barbados - 2nd Generation	11	8	14	51	24	35	24	17	8	0	53	26	4	34	16
Poland - 1st Generation	18	14	22	42	23	15	18	15	1	44	86	9	1	38	19
Poland - 2nd Generation	62	5	9	45	35	8	19	15	1	16	45	4	1	30	8
Turkey - 1st Generation	3	11	23	20	36	4	18	23	0	16	84	6	1	25	20
Turkey - 2nd Generation	12	6	11	35	38	9	18	17	2	9	44	4	2	22	16
Italy - 1st Generation	8	14	20	36	25	10	45	48	4	23	71	13	3	35	18
Italy - 2nd Generation	171	6	11	45	30	6	34	28	2	6	37	3	1	31	6
Portugal - 1st Generation	14	11	17	50	14	12	82	83	2	37	85	9	2	53	23
Portugal - 2nd Generation	64	5	10	51	24	7	56	53	1	20	58	4	1	41	12
United Kingdom - 1st Generation	31	10	13	31	45	16	8	15	1	2	92	5	1	17	11
United Kingdom - 2nd Generation	178	5	9	39	41	9	6	8	3	0	59	3	2	23	7
Canada - 1st Generation	33	9	14	31	47	12	11	13	2	5	92	5	1	13	12
Canada - 2nd Generation	230	6	11	40	38	8	11	10	5	1	57	2	2	21	3

Appendix Table B (g)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]													
	Social and Economic Risk Factors										Household and Housing Risk Factors		
	Number of children (in thousands)	% of children in official poverty	% of children in relative poverty	% of children in middle-class comfort	% of children very well-off financially	% of children in one-parent families	% of children whose fathers have less than a high school education	% of children whose mothers have less than a high school education	% of children with 5 or more siblings	% of children who live in linguistically isolated households	% of children who are not U.S. citizens, or who have at least 1 parent in the home who is not a citizen	% of children in households with no car or truck	% of children in crowded homes
South Africa - 1st Generation	5	7	11	23	58	7	1	6	1	2	84	5	0
South Africa - 2nd Generation	10	6	9	27	56	5	2	8	1	0	43	5	1
Netherlands - 1st Generation	2	14	19	24	42	18	5	7	3	3	88	7	1
Netherlands - 2nd Generation	36	5	11	40	58	7	7	6	6	1	41	1	1
India - 1st Generation	45	10	17	39	27	13	5	23	1	18	90	11	1
India - 2nd Generation	130	3	6	33	53	5	95	8	1	9	60	5	0
Philippines - 1st Generation	88	9	15	48	20	12	88	15	6	16	76	5	1
Philippines - 2nd Generation	316	4	8	44	35	7	93	13	2	7	56	2	1
Ireland - 1st Generation	4	12	14	38	26	24	76	23	7	3	90	7	3
Ireland - 2nd Generation	40	4	7	42	41	14	86	13	4	0	44	4	1

Appendix Table B (h)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]

	Parents' Labor Force Participation			Parents With Extremely Low and High Education				Language Use and Citizenship		
	% of children with fathers in the labor force	% of children with fathers not working full-time, year-round	% of children with mothers not in the labor force	% of children with fathers who have 8 or fewer years of education	% of children with mothers who have 8 or fewer years of education	% of children whose fathers have four or more years of college education	% of children whose mothers have four or more years of college education	% of children who do not speak English at home	% of children who do not speak English exclusively or very well	% of children not U.S. citizens
White, Non-Hispanic	4	19	34	2	2	28	20	1	N/A	N/A
Black, Non-Hispanic	11	34	33	6	4	12	9	1	N/A	N/A
Asian, Non-Hispanic	4	18	29	1	1	40	31	4	N/A	N/A
American Indian	14	46	40	8	6	9	7	7	N/A	N/A
Hispanic	8	30	43	9	10	12	7	15	N/A	N/A
First and Second Generation Children by Country of Origin										
All First Generation Children	12	41	45	34	38	23	14	87	45	64
All Second Generation Children	6	28	41	23	22	25	17	58	19	N/A
Laos - 1st Generation	51	68	64	48	66	8	6	97	57	89
Laos - 2nd Generation	46	68	67	36	56	7	5	95	65	N/A
Cambodia - 1st Generation	51	69	70	51	68	3	2	97	62	89
Cambodia - 2nd Generation	34	53	62	35	53	9	5	87	54	N/A
Dominican Republic - 1st Generation	12	40	45	42	43	8	4	97	55	85
Dominican Republic - 2nd Generation	10	38	54	22	25	10	6	91	31	N/A
USSR - 1st Generation	31	75	53	11	8	36	32	96	61	83
USSR - 2nd Generation	5	21	34	4	3	49	41	57	12	N/A
Mexico - 1st Generation	7	43	50	67	69	3	2	97	59	86
Mexico - 2nd Generation	7	37	50	51	48	4	3	88	32	N/A

Appendix Table B (i)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]

	Parents Labor Force Participation			Parents With Extremely Low and High Education				Language Use and Citizenship		
	% of children with fathers not in the labor force	% of children with fathers not working full time, year round	% of children with mothers not in the labor force	% of children with fathers who have 8 or fewer years of education	% of children with mothers who have 8 or fewer years of education	% of children whose fathers have four or more years of college education	% of children whose mothers have four or more years of college education	% of children who do not speak English at home	% of children who do not speak English exclusively or very well	% of children not U.S. citizens
Thailand - 1st Generation	58	73	74	50	68	8	4	95	65	93
Thailand - 2nd Generation	4	21	32	2	21	39	21	32	9	N/A
Vietnam - 1st Generation	90	57	52	32	44	11	5	97	52	78
Vietnam - 2nd Generation	11	33	42	14	23	22	9	76	34	N/A
Guatemala - 1st Generation	6	32	36	45	52	7	3	98	56	89
Guatemala - 2nd Generation	5	31	44	30	32	10	6	83	26	N/A
Honduras - 1st Generation	10	42	38	33	36	13	6	93	48	88
Honduras - 2nd Generation	8	35	43	19	19	13	8	69	18	N/A
El Salvador - 1st Generation	5	35	30	47	51	5	3	98	53	89
El Salvador - 2nd Generation	5	31	36	33	35	7	4	90	35	N/A
Nicaragua - 1st Generation	6	38	25	22	23	23	11	97	58	96
Nicaragua - 2nd Generation	4	26	37	11	12	19	11	75	22	N/A
Haiti - 1st Generation	10	43	21	19	23	7	4	91	47	84
Haiti - 2nd Generation	7	33	22	13	15	17	12	67	21	N/A
Jo, dan - 1st Generation	26	60	65	14	17	31	11	98	28	72
Jordan - 2nd Generation	9	27	68	11	11	29	11	55	8	N/A
Belize - 1st Generation	11	44	29	20	14	7	7	28	10	72
Belize - 2nd Generation	8	30	32	8	5	16	7	14	3	N/A
Iraq - 1st Generation	21	43	59	21	41	23	9	90	13	72
Iraq - 2nd Generation	8	28	61	12	17	25	17	62	10	N/A
Ecuador - 1st Generation	6	40	31	22	20	16	9	98	38	87
Ecuador - 2nd Generation	4	28	41	12	12	18	9	80	20	N/A

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Appendix Table B (i)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]

	Parents' Labor Force Participation			Parents' With Extremely Low and High Education				Language Use and Citizenship		
	% of children with fathers not in the labor force	% of children with fathers not working full-time, year-round	% of children with mothers not in the labor force	% of children with fathers who have 8 or fewer years of education	% of children with mothers who have 8 or fewer years of education	% of children whose fathers have four or more years of college education	% of children whose mothers have four or more years of college education	% of children who do not speak English exclusively or very well	% of children who do not speak English at home	% of children not U.S. citizens
Venezuela - 1st Generation	14	38	54	11	11	45	25	55	36	90
Venezuela - 2nd Generation	5	24	44	4	3	45	30	49	12	N/A
Israel - 1st Generation	13	34	55	5	6	50	34	91	28	74
Israel - 2nd Generation	5	24	54	5	6	38	32	54	15	N/A
Trinidad & Tobago - 1st Generation	13	49	24	15	12	13	6	7	4	84
Trinidad & Tobago - 2nd Generation	6	30	25	5	4	19	13	5	1	N/A
Columbia - 1st Generation	5	35	34	15	19	20	12	96	38	87
Columbia - 2nd Generation	4	26	40	10	9	22	13	78	17	N/A
Pakistan - 1st Generation	9	35	63	2	12	57	38	94	29	74
Pakistan - 2nd Generation	3	23	59	3	7	68	41	60	14	N/A
Costa Rica - 1st Generation	15	43	47	16	21	18	10	94	38	88
Costa Rica - 2nd Generation	7	29	36	10	10	20	13	61	13	N/A
Panama - 1st Generation	8	32	34	2	8	24	10	86	31	77
Panama - 2nd Generation	6	26	28	2	3	26	18	32	9	N/A
Brazil - 1st Generation	8	36	46	11	13	44	31	93	47	91
Brazil - 2nd Generation	5	25	48	9	9	38	28	50	11	N/A
Romania - 1st Generation	12	33	45	13	18	34	28	91	33	77
Romania - 2nd Generation	6	22	47	7	5	42	34	54	14	N/A
Spain - 1st Generation	7	48	42	30	28	28	15	91	26	83
Spain - 2nd Generation	4	21	40	8	8	30	19	56	12	N/A

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Appendix Table B (k)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]										
	Parents' Labor Force Participation			Parents' With Extremely Low and High Education				Language Use and Citizenship		
	the labor force	% of children with fathers not working full-time, year-round	% of children with mothers not in the labor force	% of children with fathers who have 8 or fewer years of education	% of children with mothers who have 8 or fewer years of education	% of children whose fathers have four or more years of college education	% of children whose mothers have four or more years of college education	English at home	English exclusively or very well	% of children not U.S. citizens
Lebanon - 1st Generation	12	40	63	28	23	18	11	92	26	69
Lebanon - 2nd Generation	8	24	60	10	9	40	24	62	12	N/A
Jamaica - 1st Generation	5	32	12	12	8	14	9	7	2	81
Jamaica - 2nd Generation	6	28	19	7	4	21	18	6	2	N/A
Guyana - 1st Generation	4	30	24	12	13	14	4	8	5	80
Guyana - 2nd Generation	6	27	27	3	5	27	16	7	2	N/A
Nigeria - 1st Generation	7	51	30	0	4	77	41	59	27	89
Nigeria - 2nd Generation	6	36	25	0	1	80	46	15	3	N/A
China - 1st Generation	9	41	27	30	35	28	17	97	63	83
China - 2nd Generation	4	22	32	13	15	43	32	74	23	N/A
Indonesia - 1st Generation	34	63	59	9	16	56	27	88	43	89
Indonesia - 2nd Generation	4	20	35	1	1	53	36	20	6	N/A
Iran - 1st Generation	17	45	50	4	7	60	29	93	34	89
Iran - 2nd Generation	5	21	44	1	1	71	43	49	10	N/A
Cuba - 1st Generation	7	37	37	30	29	11	9	98	36	84
Cuba - 2nd Generation	4	20	34	10	7	26	17	77	15	N/A
Peru - 1st Generation	4	34	31	6	8	26	14	98	42	88
Peru - 2nd Generation	4	25	36	5	5	30	19	69	16	N/A
Korea - 1st Generation	9	38	37	5	8	46	31	92	38	81
Korea - 2nd Generation	5	22	39	1	7	42	27	50	14	N/A

Appendix Table B (I)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]

	Parents' Labor Force Participation			Parents With Extremely Low and High Education				Language Use and Citizenship		
	% of children with fathers not in the labor force	% of children with fathers not working full-time, year-round	% of children with mothers not in the labor force	% of children with fathers who have 8 or fewer years of education	% of children with mothers who have 8 or fewer years of education	% of children whose fathers have four or more years of college education	% of children whose mothers have four or more years of college education	% of children who do not speak English at home	% of children who do not speak English exclusively or very well	% of children not U.S. citizens
Syria - 1st Generation	13	51	62	16	21	27	14	93	35	77
Syria - 2nd Generation	7	29	57	9	9	44	20	52	10	N A
Taiwan - 1st Generation	13	36	43	7	7	62	35	96	41	80
Taiwan - 2nd Generation	4	18	39	1	3	77	60	68	16	N A
Argentina - 1st Generation	6	28	41	14	15	31	26	96	26	89
Argentina - 2nd Generation	2	19	45	7	4	35	24	55	12	N A
Yugoslavia - 1st Generation	4	32	42	14	20	28	17	94	22	77
Yugoslavia - 2nd Generation	6	26	42	19	19	17	14	57	8	N A
Hong Kong - 1st Generation	13	41	33	28	31	15	7	97	94	77
Hong Kong - 2nd Generation	5	13	30	7	8	53	39	66	22	N A
Chile - 1st Generation	4	28	42	9	10	28	17	94	32	87
Chile - 2nd Generation	3	16	36	4	4	35	23	66	12	N A
Australia - 1st Generation	7	17	74	1	2	63	32	27	3	93
Australia - 2nd Generation	3	16	43	3	0	48	33	8	5	N A
Austria - 1st Generation	11	32	64	12	5	47	38	84	32	68
Austria - 2nd Generation	4	18	33	1	1	45	47	22	7	N A
France - 1st Generation	4	18	57	7	8	65	45	91	30	90
France - 2nd Generation	3	20	40	3	1	45	34	35	5	N A
Hungary - 1st Generation	5	26	46	5	6	51	32	99	28	75
Hungary - 2nd Generation	5	19	40	6	2	38	29	35	11	N A
Egypt - 1st Generation	7	32	42	2	5	75	59	88	27	65
Egypt - 2nd Generation	3	22	43	1	2	66	41	48	10	N A

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Appendix Table B (m)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]

	Parents' Labor Force Participation			Parents' With Extremely Low and High Education				Language Use and Citizenship		
	% of children with fathers not in the labor force	% of children with fathers not working full-time, year-round	% of children with mothers not in the labor force	% of children with fathers who have 8 or fewer years of education	% of children with mothers who have 8 or fewer years of education	% of children whose fathers have four or more years of college education	% of children whose mothers have four or more years of college education	% of children who do not speak English at home	% of children who do not speak English exclusively or very well	% of children not U.S. citizens
Germany - 1st Generation	6	22	52	2	5	47	27	69	15	78
Germany - 2nd Generation	3	18	36	2	1	34	22	14	4	N/A
Greece - 1st Generation	7	35	51	24	26	24	12	87	27	58
Greece - 2nd Generation	6	26	46	23	18	21	17	69	10	N/A
Japan - 1st Generation	5	22	90	2	2	78	45	94	66	96
Japan - 2nd Generation	3	19	43	2	2	44	26	34	10	N/A
Barbados - 1st Generation	1	28	14	10	13	19	12	7	2	72
Barbados - 2nd Generation	6	22	22	8	2	18	14	2	1	N/A
Poland - 1st Generation	4	26	31	7	6	32	27	96	31	80
Poland - 2nd Generation	4	19	35	6	5	30	22	55	9	N/A
Turkey - 1st Generation	11	23	52	13	17	46	34	87	18	79
Turkey - 2nd Generation	2	20	47	9	7	40	32	45	5	N/A
Italy - 1st Generation	6	30	55	33	34	24	16	85	21	60
Italy - 2nd Generation	5	21	47	19	15	19	14	35	7	N/A
Portugal - 1st Generation	5	37	31	68	65	3	3	96	28	80
Portugal - 2nd Generation	6	25	28	38	34	8	5	69	12	N/A
United Kingdom - 1st Generation	3	15	51	1	3	56	27	19	3	90
United Kingdom - 2nd Generation	3	17	36	1	1	41	26	5	1	N/A
Canada - 1st Generation	4	19	46	4	3	58	31	30	5	91
Canada - 2nd Generation	3	18	37	3	2	38	26	7	2	N/A

Appendix Table B (n)

[Countries are listed from highest to lowest official poverty rate for 1st and 2nd generations combined]

	Parents' Labor Force Participation			Parents' With Extremely Low and High Education				Language Use and Citizenship		
	% of children with fathers not in the labor force	% of children with fathers not working full-time, year-round	% of children with mothers not in the labor force	% of children with fathers who have 8 or fewer years of education	% of children with mothers who have 8 or fewer years of education	% of children whose fathers have four or more years of college education	% of children whose mothers have four or more years of college education	% of children who do not speak English at home	% of children who do not speak English exclusively or very well	% of children not U.S. citizens
South Africa - 1st Generation	6	19	50	1	1	63	35	18	4	84
South Africa - 2nd Generation	2	15	46	0	1	70	42	7	2	N/A
Netherlands - 1st Generation	3	16	48	0	3	60	34	77	10	89
Netherlands - 2nd Generation	2	14	39	2	1	40	26	9	3	N/A
India - 1st Generation	4	27	31	4	9	62	46	84	24	84
India - 2nd Generation	2	16	37	1	2	80	63	53	10	N/A
Philippines - 1st Generation	7	29	18	7	9	46	52	75	27	72
Philippines - 2nd Generation	5	20	18	3	6	37	45	21	5	N/A
Ireland - 1st Generation	5	29	56	12	7	36	13	17	5	87
Ireland - 2nd Generation	4	17	41	4	2	31	20	4	0	N/A

Appendix Table C (a)

Socioeconomic and Demographic Indicators for Third-and-Later-Generation Children for Selected Race and Ethnic Groups: 1990

[Groups are listed from highest to lowest official poverty rate]

	Social and Economic Risk Factors										Household and Housing Risk Factors			
	Number of Children [in thousands]	% of children in official poverty	% of children in relative poverty	% of children in middle-class comfort	% of children financially very well-off	% of children in one-parent families	% of children whose fathers have less than a high school education	% of children whose mothers have less than a high school education	% of children with 5 or more siblings	% of children who live in linguistically isolated households	% of children in households with no car or truck	% of children with no telephone in their homes	% of children living in houses built before 1950	% of children in crowded homes
Black, Non-Hispanic	8031	40	51	25	9	62	26	29	7	0	30	30	18	27
Dominican Republic	12	40	50	24	8	70	28	46	4	15	50	20	45	40
American Indian	562	38	51	24	7	40	28	29	8	4	14	14	32	17
Hispanic, Total	3489	31	42	31	11	42	30	35	6	9	17	17	15	25
Mexico	2203	28	39	32	11	38	30	34	6	6	9	14	19	31
Cuba	32	24	31	35	21	47	17	19	3	3	14	8	25	15
India	7	20	22	39	27	43	7	14	6	2	6	1	32	15
Guatemala	4	17	23	31	26	41	16	17	4	3	10	1	30	21
El Salvador	7	17	24	36	29	49	23	17	4	6	7	5	26	22
Ecuador	4	15	21	38	25	50	8	12	1	4	23	6	34	14
Peru	4	15	21	41	31	46	15	11	0	4	4	3	24	10
Honduras	4	14	23	36	29	50	8	13	2	5	8	3	26	10
Nicaragua	4	14	16	42	25	41	14	16	4	5	7	2	25	21
Colombia	13	13	18	33	40	35	9	10	4	3	7	6	27	12
White, Non-Hispanic	40201	11	17	42	26	18	12	12	3	0	3	3	5	23
Panama	4	11	16	45	17	52	5	13	3	0	8	3	23	25
Asian, Non-Hispanic	329	10	14	38	37	25	7	9	4	1	4	4	3	18
Philippines	41	10	16	45	24	37	11	16	3	1	4	3	17	29
China	35	5	7	34	52	20	4	4	4	2	3	2	20	13
Japan	80	3	6	37	51	17	3	2	1	0	1	1	13	13
Korea	64	3	5	40	47	11	2	2	4	0	1	1	24	4

Source: Hernandez and Darke, 1998.

Appendix Table C (b)

[Groups are listed from highest to lowest official poverty rate]

	Parents' Labor Force Participation			Parents' Extremely Low and High Education				Child's Language Use	
	% of children with fathers not in the labor force	% of children with fathers not working full-time, year-round	% of children with mothers not in the labor force	% of children with fathers who have 8 or fewer years of education	% of children whose mothers have 8 or fewer years of education	% of children whose fathers have four or more years of college education	% of children whose mothers have four or more years of college education	% of children who do not speak English at home	% of children who do not speak English exclusively or 'very well'
Black, Non-Hispanic	26	11	34	6	6	4	12	9	3
Dominican Republic	17	43	48	14	12	17	8	61	32
American Indian	34	14	46	40	8	6	9	7	18
Hispanic, Total	30	8	30	43	9	10	12	7	43
Mexico	7	29	40	8	9	11	6	36	13
Cuba	7	22	36	3	3	24	17	29	8
India	6	23	28	2	2	50	40	12	2
Guatemala	4	27	39	5	4	37	31	32	10
El Salvador	9	22	30	7	3	41	31	24	7
Ecuador	2	17	24	2	4	44	30	24	6
Peru	4	15	40	3	3	39	29	28	8
Honduras	5	24	32	5	4	48	42	24	10
Nicaragua	3	13	31	0	2	29	13	25	8
Colombia	1	17	33	3	3	52	34	21	9
White, Non-Hispanic	4	4	19	34	3	2	28	20	3
Panama	5	13	27	0	0	35	23	23	7
Asian, Non-Hispanic	4	4	18	29	1	1	40	31	8
Philippines	4	22	29	1	2	21	15	7	3
China	3	16	24	1	1	59	49	12	5
Japan	2	13	23	0	0	47	41	4	1
Korea	2	13	31	1	0	56	45	2	1



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